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NAVAL WEATHER SERVICE DETACHMENT ASHEVILLE N C  
SUMMARY OF METEOROLOGICAL OBSERVATIONS, SURFACE (SMOS), FUTENMA--ETC(U)  
JUL 78

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DIRECTOR

NAVAL OCEANOGRAPHY AND METEOROLOGY

S M O S

(Summary of Meteorological Observations, Surface)

Prepared by  
Naval Weather Service Detachment  
Federal Building  
Asheville, N. C. 28801

Log Number 72006

Period: 1968-77

Station: FUTENIMA, OAKHANA

Date: JULY 1978

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Summary of Meteorological Observations, Surface (SMOS) Futenma, Okinawa		5. TYPE OF REPORT & PERIOD COVERED Reference report 1960-1977
7. AUTHOR(s) Naval Weather Service Detachment Asheville, N. C. 28801		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Weather Service Detachment Federal Building Asheville, N. C. 28801		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS Director, Naval Oceanography and Meteorology National Space Technology Laboratories NSTL Station, MS 39529		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE July 1978
		13. NUMBER OF PAGES 358
		15. SECURITY CLASS. (of this report) Unclassified
15. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		NTIS White Section <input checked="" type="checkbox"/> DDC Buff Section <input type="checkbox"/> UNANNOUNCED <input type="checkbox"/> JUSTIFICATION BY DISTRIBUTION/AVAILABILITY CODES Dist. A/AIL and/or SPECIAL A
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Climatology, surface wind, temperature, precipitation, ceiling, visibility, relative humidity, station pressure, extreme temperatures, sea level pressure, daily temperature, weather conditions, monthly climatology, Naval shore facility, coastal region, snow depth, cloud cover, Futenma, Okinawa		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This data report consists of a six part statistical summary of surface weather observations. The six parts are: Part A - Weather Conditions/Atmospheric Phenomena, Part B - Precipitation/Snowfall/Snow Depth, Part C - Surface Winds, Part D - Ceiling versus Visibility/Sky Cover, Part E - Psychrometric Summaries, Part F - Station Pressure/Sea Level Pressure		



STATION NO ON SUMMARY 42215	STATION NAME Futenma, Okinawa	LATITUDE 26°16'N	LONGITUDE 127°45'E	STATION ELEV (FT) 247 MSL	CALL SIGN ROTM	AWO NUMBER 47933
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## STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FEET	TYPE BAROMETER	
1.	Weather service office, Bldg 510	MCAF	1960		26°16'N	127°45'E	275	Mercurial	Var
1a.	" " " "	"	1961	1970	"	"	277	Aneroid	24
2a.	" " " "	MCAS	1970		"	"	"	"	"

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	1961	800 feet west of Bldg 510	UMQ-5	RD-108B	15'	1. Barograph (NL-3-A) 2. Semi-auto met sta (AN/GMQ-14B) 3. Cloud height set (AN/GMQ-13) 4. Theodolite (ML-47P) 5. Transmissometer (AN/GMQ-10C) 6. Indicator, Digital (ID 1348 GMQ-10) 7. Converter (CV 2062 GMQ-10)

## SUMMARY OF METEOROLOGICAL OBSERVATIONS, SURFACE

DIRNAVOCEANMET ltr 3146 Ser 1032 dated 26 August 1977 (NOTAL) established the following policy for SMOS production and updating:

1. Ten years of data will be used as the standard period of record (POR).
2. All available data will be used for extreme values.
3. Summarize (update) every five years.
  - a. Summarize the five year period (1973-1977) for all sections of the SMOS except extremes. The 5 year summary will be an intermediate SMOS to show secular trends. All available data through 1977 will be included for extreme values.
  - b. The update in 1983 will include the POR 1973 through 1982, with all available data through 1982 for extreme values.
  - c. The update in 1988 will be an intermediate SMOS (POR 1983-1987). All available data through 1987 will be included for extreme values.
  - d. In 1993 the POR will be 1983 through 1992. All available data through 1992 will be used for extreme values.

Each standard POR (10 years) summary should be retained by individual stations along with the SMOS prepared in 1973. The retention of these summaries will provide the most comprehensive climatological file for your station.

DESCRIPTION: Preceding each section is a brief description of the data comprising each part of the summary and the manner of presentation. Tabulations are prepared from 3-hourly and daily observations recorded by stations operated by the U.S. Navy and U.S. Marine Corps. 3-hourly observations are defined as these record or record-special observations recorded at scheduled 3-hourly intervals. Daily observations are selected from all data recorded on reporting forms and combined into Summary of the Day observations (prepared from record-special, local, summary of the day, remarks, etc.).

COMMENT: All observations summarized in this tabulation have been computer edited for consistency and reasonableness prior to, or during, the processing stage. Efforts to improve the quality of the data after summarization are expensive, i.e., the improvement might consist of the elimination of one suspect or erroneous value. The cost of preparing "perfect" copy can be prohibitive due to the handwork involved. Suspect cases will occur infrequently, but users should not disregard extreme values completely as some could be valid. Questionable values will most likely be single occurrences shown by a percentage frequency of ".0". (This value indicates a percent less than ".05," which, in most cases, reflects a single observation.) Since most stations summarized now have in excess of 10,000 3-hourly observations, the occurrence of an occasional spurious value should not in itself be considered significant. Every effort is made by this office to maintain a high degree of accuracy and reliability in these tables, and the Naval Weather Service Detachment (NWS), Asheville, N. C. welcomes your comment and criticisms.

## PART A

## WEATHER CONDITIONS

This summary is a percentage frequency occurrence of various atmospheric phenomena and obstructions to vision, derived from 3-hourly observations, and is presented in three tables as follows:

1. By month and annual, all hours and years combined.
2. By month and annual, all hours and years combined, by wind direction.
3. By month, all years combined, by standard 3-hour groups.

Occurrences of the various phenomena included in each category on the forms are listed below:

Thunderstorms - All reported occurrences of thunderstorm, tornado, and waterspout.

Rain and/or drizzle - All liquid precipitation, falling to the ground, not freezing.

Freezing rain and/or freezing drizzle (glaze) - Precipitation falling in liquid form, but freezing on contact with an unheated surface.

Snow and/or sleet - Included are snow, sleet, snow pellets (soft hail), snow grains, and ice crystals.

Hail Occurrences of hail and small hail are included.

Percentage of observations with precipitation - Included in this category are the observations when one or more of the above phenomena occurred. Since more than one type of precipitation may be reported in the same observation, the sums of the individual categories may exceed the total columns.

Fog - Included are fog, ice fog, and ground fog.

Smoke and/or haze - Occurrences of smoke, haze, or combinations of smoke and haze are included.

Blowing snow - Occurrences of blowing snow (also drifting snow when reported from non-WBAN sources.)

Dust and/or sand - Included are blowing dust, blowing sand, and dust.



Blowing spray - This item if reported, is not shown in a separate category on this form but is included in the computation Percentage of Observations with Obstructions to Vision.

Percentage of observations with obstructions to vision - Included in this category are the observations when one or more of the above obstructions to vision occurred. Since more than one type of obstruction may be reported in the same observation, the sums of the individual categories may exceed the percentage total columns. Also, although precipitation may reduce visibility, it is not considered an obstruction to vision for purposes of this summary; therefore, the percentage total of obstructions to vision need not reflect the total observations with reduced visibility.

**NOTE:** The total number of observations may vary among tables within the same month and period. Percentages may not always equal 100.0 due to rounding practices.



## PART A

## ATMOSPHERIC PHENOMENA

This summary is a presentation of the percentage of days with occurrences of various atmospheric phenomena. These data are obtained from all recorded information on the reporting forms and combined into a daily observation.

The descriptions of the phenomena in the Weather Conditions Summary above also apply for the categories summarized in these tabulations. However, it should be noted that in this summary the columns headed "% OF OBS WITH PRECIP" and "% OF OBS WITH OBST TO VISION" show the percentage of days rather than percentage of observations. Since more than one type of precipitation or more than one type of obstruction may occur in the same daily observation, the sum of the values in the individual columns may not equal the total columns.

This presentation is by month with annual totals, and is prepared with all years combined.

NOTE: A day with rain and/or drizzle was not separately reported in WBAN data prior to January 1949. Therefore percentages in this column are restricted to the period January 1949 and later.

A day with dust and/or sand was punched and included in this summary only when visibility was less than  $5/8$  mile.

Percentage Frequency of Wind Direction vs. Weather Conditions - This tabulation is derived from 3-hourly observations and is presented by month and annual, all hours and years combined. The main body of the Summary consists of weather conditions (horizontally) and wind directions (vertically) to 16 compass points (plus calm). Column totals show the number of observations. "% Total" indicates percentage frequency of occurrences.

## WEATHER CONDITIONS

JAN  
MONTH

73-77

YEARS

FUTENMA, OKINAWA

STATION NAME

42215

STATION

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	00		12.3				12.3	.6	.6			1.3	155
	03		15.5				15.5	.6				.6	155
	06		20.0				20.0	1.9				1.9	155
	09		13.5				13.5	3.9	1.3			5.2	155
	12		14.2				14.2	3.9	.6			4.5	155
	15		15.5				15.5	2.6	1.3			3.9	155
	18		13.5				13.5	4.5	1.3			5.8	155
	21		11.0				11.0		.6			.6	155
TOTALS			14.4				14.4	2.3	.7			3.0	1240

# WEATHER CONDITIONS

5701 WEATHER CONDITIONS JAN 1978

42215 STATION FUTENMA, OKINAWA 73-77 YEARS FEB MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER-STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
FEB	00		14.9				14.9	2.1	1.4			3.5	141
	03		10.6				10.6	2.1	.7			2.8	141
	06		13.5				13.5	2.1	.7			2.8	141
	09		12.8				12.8	5.7	2.8			8.5	141
	12		9.9				9.9	4.3	1.4			5.7	141
	15		14.2				14.2	2.8	3.5			6.4	141
	18		13.5				13.5	1.4	5.7			7.1	141
	21	.7	15.6				15.6	3.5	1.4			5.0	141
TOTALS		.1	13.1				13.1	3.0	2.2			5.2	1128

## WEATHER CONDITIONS

MAR  
MONTH

YEARS

73-77

STATION NAME

FUTENMA, OKINAWA

STATION

42215

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
MAR	00	.6	11.6				11.6	3.2	3.2			6.5	155
	03		11.6				11.6	4.5	5.2			9.7	155
	06		14.2				14.2	3.9	5.8			9.7	155
	09		16.8				16.8	9.7	10.3			18.7	155
	12	.6	12.9				12.9	3.2	9.0			11.6	155
	15		14.2				14.2	6.5	7.1			13.5	155
	18		16.8				16.8	10.3	9.0			18.7	155
	21	.6	14.2				14.2	7.7	4.5			12.3	155
TOTALS		.2	14.0				14.0	6.1	6.8			12.6	1240



## WEATHER CONDITIONS

APR  
MONTH

73-77

YEARS

FUTENMA, OKINAWA  
STATION NAME42215  
STATIONPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
APR	00	1.3	7.3				7.3	3.3	7.3			10.7	150
	03		10.0				10.0	7.3	7.3			14.7	150
	06	.7	13.3				13.3	11.3	8.7			19.3	150
	09	2.7	14.7				14.7	9.3	10.0			19.3	150
	12	2.7	10.7				10.7	3.3	7.3			10.7	150
	15	.7	12.0				12.0	4.7	5.3			10.0	150
	18		7.3				7.3	6.7	5.3			12.0	150
	21	.7	7.3				7.3	2.0	6.0			8.0	150
TOTALS		1.1	10.3				10.3	6.0	7.2			13.1	1200

## WEATHER CONDITIONS

MAY  
MONTH

73-77

42215 FUTENMA, OKINAWA  
STATION NAME

YEARS

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
MAY	00	1.3	12.9				12.9	7.7	2.6			10.3	155
	03	.6	17.4				17.4	7.1	2.6			9.7	155
	06	1.3	11.0				11.0	9.0	4.5			13.5	155
	09	.6	20.0				20.0	7.7	3.2			11.0	155
	12	.6	10.3				10.3	3.2	3.2			6.5	155
	15		14.2				14.2	4.5	5.2			9.7	155
	18		15.5				15.5	7.1	3.9			11.0	155
	21		13.5				13.5	7.7	3.9			11.6	155
TOTALS		.6	14.4				14.4	6.8	3.6			10.4	1240



## WEATHER CONDITIONS

5701 WEATHER CONDITIONS JAN 1988

42215  
STATIONFUTENMA, OKINAWA  
STATION NAME

73-77

YEARS

JUN  
MONTHPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JUN	00		15.3				15.3	5.3	.7			6.0	150
	03	.7	18.0				18.0	5.3	1.3			6.7	150
	06	.7	12.7				12.7	13.3	3.3			16.0	150
	09		14.1				14.1	7.4	2.0			9.4	149
	12		16.7				16.7	6.0	1.3			8.0	150
	15		17.3				17.3	4.0	2.7			6.7	150
	18	.7	20.7				20.7	3.3	1.3			5.3	150
	21	2.0	16.0				16.0	6.7	.7			7.3	150
TOTALS		.5	15.4				16.4	6.4	1.7			8.2	1199

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## WEATHER CONDITIONS

42215 STATION FUTENMA, OKINAWA 73-77 YEARS JUL MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JUL	00		7.7				7.7	1.3				1.3	155
	03		11.0				11.0	5.2				5.2	155
	06	.6	11.6				11.6	3.9	.6			4.5	155
	09		10.3				10.3	3.2	1.3			4.5	155
	12	.6	11.6				11.6	2.6	1.9			4.5	155
	15	1.3	12.3				12.3	1.9	1.9			3.9	155
	18	.6	8.4				8.4	3.2	.6			3.9	155
	21	.6	9.0				9.0	2.6	.6			3.2	155
TOTALS		.5	10.2				10.2	3.0	.9			3.9	1240

# WEATHER CONDITIONS

5701 WEATHER CONDITIONS JAN 88

42215 STATION FUTENMA, OKINAWA 73-77 YEARS AUG MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER-STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
AUG	00	1.3	7.7				7.7	1.9	3.2			5.2	155
	03	1.3	9.0				9.0	1.9	3.2			5.2	155
	06		7.1				7.1	5.2	3.9			9.7	155
	09		6.5				6.5	1.9	4.5			8.4	155
	12	.6	7.7				7.7	1.9	5.2			7.1	155
	15	1.3	9.0				9.0	1.3	7.7			9.7	155
	18	.6	6.5				6.5	1.3	5.2			7.1	155
	21		6.5				6.5	1.9	3.9			6.5	155
TOTALS		.6	7.5				7.5	2.2	4.6			7.4	1240

## WEATHER CONDITIONS

42213

STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

SEP

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
SEP	00		7.3				7.3		4.0			4.7	150
	03	.7	9.3				9.3	2.7	3.3			6.7	150
	06		8.7				8.7	2.0	4.0			6.0	150
	09	.7	6.0				6.0	2.0	4.0			6.0	150
	12	1.3	7.3				7.3	2.0	5.3			8.0	150
	15	2.7	10.0				10.0	.7	3.3			4.0	150
	18	1.3	6.7				6.7		2.7			2.7	150
	21		5.3				5.3	.7	2.7			4.0	150
TOTALS		.8	7.6				7.6	1.3	3.7			5.3	1200



## WEATHER CONDITIONS

OCT  
MONTH

73-77

YEARS

FUTENMA, OKINAWA

STATION NAME

42215

STATION

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
OCT	00	.6	7.7				7.7	.6	.6			1.3	155
	03		9.7				9.7	1.3	.6			1.9	155
	06	.6	9.0				9.0	1.3	2.6			4.5	155
	09	.6	9.0				9.0	.6				.6	155
	12	1.3	11.0				11.0	1.3				2.6	155
	15	.6	9.0				9.0	.6	.6			1.9	155
	18	.6	11.0				11.0	1.3	1.3			3.2	155
	21		9.7				9.7	1.3	1.3			2.6	155
TOTALS		.5	9.5				9.5	1.0	.9			2.3	1240

## WEATHER CONDITIONS

NOV  
MONTH

73-77

YEARS

FUTENMA, OKINAWA  
STATION NAME42215  
STATIONPERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
NOV	00		11.3				11.3					.7	150
	03		11.3				11.3						150
	06		10.7				10.7						150
	09		12.0				12.0	.7	1.3			2.0	150
	12		8.0				8.0	1.3				1.3	150
	15		10.0				10.0	1.3	1.3			2.7	150
	18		8.0				8.0	1.3	.7			2.0	150
	21		13.3				13.3						150
TOTALS			10.6				10.6	.6	.4			1.1	1200



# WEATHER CONDITIONS

5701 WEATHER CONDITIONS JAN 1978

00019

42215 STATION NAME FUTENMA, OKINAWA 73-77 YEARS MONTH DEC

## PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER-STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
DEC	00		8.4				8.4						155
	03		13.5				13.5	.6				.6	155
	06		13.5				13.5	.6				.6	155
	09		12.9				12.9	2.6	.6			3.2	155
	12		11.6				11.6	1.3				1.3	155
	15		12.9				12.9	1.3	.6			1.9	155
	18		13.5				13.5	3.2				3.9	155
	21		11.0				11.0	1.3				1.3	155
TOTALS			12.2				12.2	1.4	.2			1.6	1240

## WEATHER CONDITIONS

ALL MONTH

73-77

YEARS

42215 FUTENMA, OKINAWA STATION NAME

STATION

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	ALL		14.4				14.4	2.3	.7			3.0	1240
FEB		.1	13.1				13.1	3.0	2.2			5.2	1128
MAR		.2	14.0				14.0	6.1	6.8			12.6	1240
APR		1.1	10.3				10.3	6.0	7.2			13.1	1200
MAY		.6	14.4				14.4	6.8	3.6			10.4	1240
JUN		.5	16.4				16.4	6.4	1.7			8.2	1199
JUL		.5	10.2				10.2	3.0	.9			3.9	1240
AUG		.6	7.5				7.5	2.2	4.6			7.4	1240
SEP		.8	7.6				7.6	1.3	3.7			5.3	1200
OCT		.5	9.5				9.5	1.0	.9			2.3	1240
NOV			10.6				10.6	.6	.4			1.1	1200
DEC			12.2				12.2	1.4	.2			1.6	1240
TOTALS		.4	11.7				11.7	3.3	2.7			6.2	14607

# WEATHER CONDITIONS

## ATMOSPHERIC PHENOMENA

42215 STATION FUTEHA, OKINAWA 60-77 YEARS ALL MONTH

### PERCENTAGE OF DAYS WITH VARIOUS ATMOSPHERIC PHENOMENA FROM DAILY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	DAILY	.8	65.9				65.9	15.7	2.6			17.5	496
FEB		1.8	62.5		.2		62.5	22.2	5.5			25.9	437
MAR		3.6	62.2		.2		62.2	28.6	15.8			38.9	476
APR		6.7	50.3				50.3	26.8	17.1			35.9	463
MAY		8.3	63.5				63.5	29.8	11.5			36.1	496
JUN		10.0	64.9				64.9	26.3	10.0			31.6	510
JUL		6.7	56.2				56.2	12.1	5.8			14.7	539
AUG		10.1	59.7				59.7	11.4	10.5			18.8	544
SEP		9.0	60.8				60.8	10.0	11.0			18.2	510
OCT		5.2	57.5				57.5	9.7	7.5			15.3	496
NOV		.8	55.0				55.0	11.8	4.9			14.7	491
DEC		.9	62.1				62.1	13.1	3.2			15.1	536
TOTALS		5.3	60.0		.0		60.0	18.1	8.8			23.6	5994

PERCENTAGE FREQUENCY OF WIND DIRECTION  
VS. WEATHER CONDITIONS

STATION 42215 FUTENMA, OKINAWA JAN 1973-DEC 1977 MONTH JANUARY ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET " SHOWERS ICE CRYSTALS	SNOW " GRAINS " PELLETS " SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	10.0	4.5	.5						2.0		.5			84.6
NNE	8.9	6.1	3.3						1.1		.6			81.1
NE	9.9	.7	.7						1.3		.7			88.2
ENE	13.5	2.1							2.8					84.4
E	13.0	3.5							3.5					83.5
ESE	8.6	5.2							3.4					84.5
SE	10.9	6.5							2.2					82.6
SSE	29.2								4.2					70.8
S	11.8	11.8							17.6					70.6
SSW														100.0
SW		50.0												50.0
WSW														100.0
W		40.0												60.0
WNW	13.6	9.1							9.1					77.3
NW	2.6	1.3												96.1
NNW	3.1	7.0	.8						2.3		3.9			85.3
VARIABLE	1.7	6.7									1.7			90.0
CALM														
TOTAL	114	56	9						28		9			1050
% TOTAL	9.2	4.5	.7						2.3		.7			84.7

TOTAL NUMBER OF OBSERVATIONS 1,240



# PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION 42215 PUTENMA, OKINAWA STATION NAME JAN 1973-DEC 1977 MONTH FEBRUARY ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET SHOWERS ICE CRYSTALS	SNOW GRAINS PELLETS SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	9.8	12.1	.6						1.7		3.4			74.7
NNE	5.9	3.4							.8	.8				90.8
NE	5.0	2.5	2.5						1.3		2.5			87.5
ENE	6.3								1.3		1.3			92.4
E	3.1	2.1									2.1			92.7
ESE	4.6	4.6									1.5			89.2
SE	1.6	1.6												96.7
SSE		7.4							1.9		3.7			88.9
S	1.4	5.7							8.6		1.4			88.6
SSW		2.9									2.9			94.1
SW	3.7	14.8							14.8		11.1			59.3
WSW		75.0							50.0		25.0			
W	11.8	29.4							29.4					58.8
WNW		12.5						6.3			6.3			81.3
NW		9.1							2.3		2.3			88.6
NNW	7.8	15.5	.9						5.2		.9			75.0
VARIABLE														
CALM	5.6	12.5							2.8		2.8			78.2
TOTAL	57	87	4					1	33	1	25			951
% TOTAL	5.1	7.7	.4					.1	2.9	.1	2.2			84.3

TOTAL NUMBER OF OBSERVATIONS 1,128

PERCENTAGE FREQUENCY OF WIND DIRECTION  
VS. WEATHER CONDITIONS

STATION 42215 FUTENMA, OKINAWA STATION NAME JAN 1973-DEC 1977 YEARS MONTH MARCH ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW GRAINS PELLETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	9.4	8.0	1.9					.5	9.9	.5	6.6			71.4
NNE	15.0	2.0	2.0						9.0		6.0			75.0
NE	26.0		1.4						5.5		1.6			71.2
ENE	17.4	1.2	3.5						11.6		1.2			76.7
E	7.6	.8							1.7		3.4			89.1
ESE	3.3	7.8							1.1		4.4			83.3
SE		2.9									5.8			91.3
SSE	1.6	3.2									15.9			79.4
S	3.5	9.3						1.2	9.3		14.0			70.9
SSW		7.0	2.3					2.3	7.0		2.3			86.0
SW		13.2							10.5		18.4			68.4
WSW	4.3								4.3		18.2			77.3
W	7.1	14.3									7.1			71.4
WNW	5.6	11.1							5.6		11.1			66.7
NW	8.7	8.7							13.0					78.3
NNW	5.1	10.2	1.0						6.1		3.1			79.6
VARIABLE														
CALM	2.4	1.2							1.2	1.2	11.4			83.3
TOTAL	97	65	12					3	74	2	84			969
% TOTAL	7.8	5.2	1.0					.2	6.0	.2	6.8			78.1

TOTAL NUMBER OF OBSERVATIONS 1,240



# PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION 42215 FUTENMA, OKINAWA STATION NAME JAN 1973-DEC 1977 MONTH APRIL ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET SHOWERS ICE CRYSTALS	SNOW GRAINS PELETS SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	6.2	9.3	1.0						6.2		9.3			72.2
NNE	10.9	6.5	2.2						4.3	2.2	10.9			69.6
NE	9.8								3.9	2.0	11.8			78.4
ENE	11.9		3.4						3.4		13.6			74.6
E	5.7	3.1	1.3					1.9	5.7		9.4			78.6
ESE	8.1	2.0	1.0					1.3	10.3		6.1			81.8
SE	3.8	3.8	1.3					.9	4.3	.9	3.8			79.5
SSE	4.3							2.9	2.3		5.4			86.5
S	1.7	3.5	.6						11.1		4.6			88.4
SSW	1.2	3.7							2.2		6.2			80.2
SW	2.2	2.2							2.2		13.3			80.0
WSW		15.4									7.7			76.9
W	4.0	12.0						8.0	4.0	4.0	4.0			80.0
WNW		15.4							7.7					84.6
NW	8.8	11.8							8.8		8.8			70.6
NNW	9.4	7.5						1.9	9.4		3.8			79.2
VARIABLE														
CALM	1.2	4.8	1.0						1.2	3.2	3.2			85.7
TOTAL	64	50	10					13	67	5	86			965
% TOTAL	5.3	4.2	.8					1.1	5.6	.4	7.2			80.4

TOTAL NUMBER OF OBSERVATIONS 1,200

PERCENTAGE FREQUENCY OF WIND DIRECTION  
VS. WEATHER CONDITIONS

42215 FUTENNA, OKINAWA JAN 1973-DEC 1977 MAY ALL  
STATION NAME STATION YEARS MONTH HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET " SHOWERS ICE CRYSTALS	SNOW GRAINS PELLETS " SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	16.6	5.3							11.9		6.8			66.1
NNE	16.7	11.9	4.8						9.3	2.4	7.1			57.1
NE	5.6	9.9							5.6		5.6			78.9
ENE	6.1	6.9	1.2						4.9		9.8			78.0
E	9.3	6.0						1.0	6.3		4.0			79.6
ESE	4.4	7.3						.6	3.8		1.3			87.4
SE	2.6	6.4							6.4		3.8			83.3
SSE		11.4						4.3	9.1		2.3			75.0
S	2.2	11.8							5.4	1.1	3.2			78.3
SSW	3.6	7.2							7.2		7.2			75.9
SW		6.0							13.4		1.3			82.1
WSW		11.4						2.9	2.9		2.9			85.7
W	4.4	13.3							6.7					80.0
WNW	3.6	3.6												92.9
NW	2.3	22.3							7.3					72.3
NNW	4.3	11.4	2.3						6.8		2.3			79.3
VARIABLE														
CALM	8.3	3.8						1.4	5.8	1.4				85.3
TOTAL	69	105	4					7	81	3	45			986
% TOTAL	5.6	8.3	.3					.6	6.5	.2	3.6			79.3

TOTAL NUMBER OF OBSERVATIONS 1,240

PERCENTAGE FREQUENCY OF WIND DIRECTION  
VS. WEATHER CONDITIONS

42215 FUTENMA, OKINAWA JAN 1973-DEC 1977 JUNE ALL  
STATION STATION NAME YEARS MONTH HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET SHOWERS ICE CRYSTALS	SNOW GRAINS PELLETS SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	6.3	18.8							6.3					75.0
NNE	25.0	12.5							6.3					62.5
NE	19.2	11.5	3.8						13.4		11.5			53.8
ENE	22.0	13.6	1.7						13.6		1.7			64.4
E	10.4	6.3	2.1						6.9					78.5
ESE	13.7	7.8									5.9			76.5
SE	5.2	3.4							3.4					91.4
SSE	7.2	5.8						1.4	1.4					87.0
S	3.7	6.3						.5	2.6		1.6			87.4
SSW	3.2	7.2						.5	2.3	.9	.9			86.5
SW	3.7	7.4						.7	16.2	1.3	2.9			70.6
WSW	12.1	10.3							15.5		1.7			62.1
W	7.3	17.1							2.4		2.4			73.2
WNW	12.5	18.8						6.3						68.8
NW	17.6							5.6	5.6		11.1			82.4
NNW	5.6	11.1												72.2
VARIABLE														
CALM	8.8	18.1							8.3	1.6				72.1
TOTAL	94	99	5					6	72	5	20			942
% TOTAL	7.8	8.3	.4					.5	6.0	.4	1.7			78.6

TOTAL NUMBER OF OBSERVATIONS 1,199



# PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION 42215 PUTENMA, OKINAWA STATION NAME JAN 1973-DEC 1977 MONTH JULY ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET SHOWERS ICE CRYSTALS	SNOW GRAINS PELLETS SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N		9.1												90.9
NNE		23.1						7.7						76.9
NE	4.8	28.6												66.7
ENE	7.1	9.5						2.4						81.0
E	3.6	4.8						1.2	.6		1.2			91.0
ESE	1.2	3.7												95.1
SE	2.9	3.1							3.6		.7			90.6
SSE	3.4	3.4							4.3					87.1
S	3.4	5.6						.6	6.6		.6			84.3
SSW	4.0	3.0							3.0					88.0
SW	6.5	4.8							8.1		1.6			83.3
WSW	3.9	3.9							7.8		2.0			82.4
W		11.1									8.3			80.6
WNW		4.2	4.2											91.7
NW	14.3	4.8												81.0
NNW	14.3	14.3												71.4
VARIABLE														
CALM	2.3	6.7							1.7		1.7			89.9
TOTAL	48	78	1					6	37		11			1088
% TOTAL	3.9	6.3	.1					.5	3.0		.9			87.7

TOTAL NUMBER OF OBSERVATIONS 1,240

PERCENTAGE FREQUENCY OF WIND DIRECTION  
VS. WEATHER CONDITIONS

STATION 42215 FUTENMA, OKINAWA STATION NAME JAN 1973-DEC 1977 YEARS MONTH AUGUST ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET SHOWERS ICE CRYSTALS	SNOW GRAINS PELLETS SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N		7.7									7.7			84.6
NNE	5.6	11.1							5.6		5.6			77.8
NE	2.5	7.5									10.0			82.5
ENE	1.4	5.5							2.7		6.8			82.2
E	1.0	2.6						.3	.7		1.0			94.1
ESE	.6	7.6						1.0	1.3					91.1
SE	3.0	9.1						1.9	3.8		5.1			81.8
SSE		3.8						3.5	3.8		1.9			90.6
S		7.7							3.8					88.5
SSW	2.7	10.8						2.8	10.8		5.4			75.7
SW		13.9						2.2	8.3		5.6			75.0
WSW	2.2	6.7						2.2	4.4	2.2	13.3			75.6
W	4.1	4.1							6.1		18.4			73.5
WNW	5.8	5.8							3.8		3.8			82.7
NW	6.3	4.2									14.6			70.8
NNW		10.3									12.8			76.9
VARIABLE														
CALM	2.0	1.0						1.0		1.0	2.0			92.9
TOTAL	22	71						8	25	2	57			1068
% TOTAL	1.8	5.7						.6	2.0	.2	4.6			86.1

TOTAL NUMBER OF OBSERVATIONS

1,240

# PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION 42215 PUTENHA, OKINAWA JAN 1973-DEC 1977 MONTH SEPTEMBER ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET SHOWERS ICE CRYSTALS	SNOW GRAINS PELLETS SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	4.3	2.2							2.2					93.5
NNE	12.5	5.4												82.1
NE	1.4	4.3							1.4		1.4			92.8
ENE	1.9	5.6												92.5
E	1.6	3.1						1.6	2.1		3.1			91.6
ESE	2.4	3.6						1.4	1.6		4.8			87.1
SE		1.4												97.1
SSE		3.7												96.3
S		6.8									6.8			88.1
SSW		4.5									22.7			72.7
SW		9.5						4.8	4.8		4.8			81.0
WSW	4.0	32.0						4.0	4.0		24.0			44.0
W	11.4	9.1						2.3			22.7			61.4
WNW	2.7	8.1							5.4		5.4			81.1
NW	7.5	7.5						2.5	2.5					82.5
NNW	6.5	6.5						6.5	3.2					87.1
VARIABLE														
CALM		2.5							1.5		1.5			96.1
TOTAL	30	61						10	15		44			1064
% TOTAL	2.5	5.1						.8	1.3		3.7			88.7

TOTAL NUMBER OF OBSERVATIONS 1,200



PERCENTAGE FREQUENCY OF WIND DIRECTION  
VS. WEATHER CONDITIONS

STATION 42215 FUTENMA, OKINAWA STATION NAME JAN 1973-DEC 1977 YEARS OCTOBER MONTH ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET "SHOWERS ICE CRYSTALS	SNOW GRAINS "PELETS "SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	4.5	14.5						2.7		1.8	.9			79.1
NNE	1.7	8.1								1.2	1.2			89.0
NE	3.8	5.1							.6					91.1
ENE	1.2	4.1							.6	.6	1.8			92.9
E	3.1	7.5	.4					.4	.4	.9	.9			88.1
ESE	5.8	7.2						1.4	4.3		1.4			82.6
SE	2.9	5.7												91.4
SSE	3.7	11.1												85.2
S		3.2						3.2						96.8
SSW		13.3												86.7
SW											3.6			94.4
WSW	8.3										8.3			83.3
W		5.6												94.4
WNW	7.1	21.4												71.4
NW														100.0
NNW														100.0
VARIABLE														
CALM	1.6	3.2	.8					.8						91.6
TOTAL	33	83	2					7	6	7	11			1107
% TOTAL	2.7	6.7	.2					.6	.3	.6	.9			89.3

TOTAL NUMBER OF OBSERVATIONS 1,240

# PERCENTAGE FREQUENCY OF WIND DIRECTION VS. WEATHER CONDITIONS

STATION 42215 FUTENMA, OKINAWA JAN 1973-DEC 1977 MONTH NOVEMBER ALL HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET SHOWERS ICE CRYSTALS	SNOW GRAINS PELLETS SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	4.6	4.6	2.1						.4		1.2			88.0
NNE	11.2	5.1	.4						.4		.7			82.6
NE	3.3	4.3												92.4
ENE	3.0	2.4												94.7
E	2.8	4.3												92.9
ESE		5.3												93.8
SE	5.6	11.1												83.3
SSE		12.5												87.5
S									6.7					93.3
SSW		25.0												75.0
SW		33.3												66.7
WSW		20.0												80.0
W														100.0
WNW														100.0
NW	12.5	12.5												75.0
NNW	3.0	3.0												93.9
VARIABLE														
CALM	7.4	2.4							7.4					83.3
TOTAL	64	57	6						6		1	5		1067
% TOTAL	5.3	4.8	.5						.5		.1	.4		88.9

TOTAL NUMBER OF OBSERVATIONS 1,200

PERCENTAGE FREQUENCY OF WIND DIRECTION  
VS. WEATHER CONDITIONS

42215

FUTENMA, OKINAWA

STATION NAME

JAN 1973-DEC 1977

YEARS

DECEMBER

MONTH

ALL

HOURS (L.S.T.)

WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET " SHOWERS ICE CRYSTALS	SNOW " GRAINS " PELLETS " SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER
N	10.4	7.6							2.9					81.7
NNE	11.2	3.0	1.0						2.0					84.8
NE	6.5	.6							.6					92.3
ENE	6.7	1.7							1.7					91.6
E	4.1	4.1							.8					91.8
ESE														100.0
SE	5.9	2.9												91.2
SSE	3.2	9.7												87.1
S	5.7	11.4	2.9											80.0
SSW	11.8	5.9	5.9											76.5
SW	22.2	22.2												55.6
WSW	12.5													87.5
W		11.1												88.9
WNW		9.1												90.9
NW	5.6	5.6												88.9
NNW	4.9	7.4							1.2		1.2			86.4
VARIABLE														
CALM	2.4	1.2												96.3
TOTAL	91	56	4						17		2			1086
% TOTAL	7.3	4.5	.3						1.4		.2			87.6

TOTAL NUMBER OF OBSERVATIONS

1,240



PERCENTAGE FREQUENCY OF WIND DIRECTION  
VS. WEATHER CONDITIONS

42215			PUTENNA, OKINAWA			STATION NAME			JAN 1973-DEC 1977			YEARS			ALL			MONTH			HOURS (L.S.T.)			ALL		
WIND DIRECTION	RAIN	RAIN SHOWERS	DRIZZLE	FREEZING RAIN FREEZING DRIZZLE	SLEET SHOWERS ICE CRYSTALS	SNOW GRAINS PELLETS SHOWERS	HAIL SMALL HAIL	THUNDER	FOG	ICE FOG GROUND FOG	SMOKE HAZE	BLOWING SNOW	BLOWING SAND AND DUST	NO WEATHER												
N	8.2	7.9	.8					.3	3.5	.2	2.8			79.8												
NNE	9.5	5.6	1.1					.1	2.0	.4	1.6			82.0												
NE	7.1	3.9	.5						1.9	.1	2.1			86.5												
ENE	7.2	3.6	.6					.1	2.9	.1	2.3			86.3												
E	4.9	4.2	.3					.3	2.4	.1	2.1			87.9												
ESE	3.9	5.7	.1					.4	2.1		2.1			87.9												
SE	3.2	4.8	.1					.4	2.7		2.0			88.3												
SSE	4.0	4.9						.8	2.9	.2	3.2			85.9												
S	2.9	6.8	.2					1.1	4.5	.2	3.2			84.8												
SSW	2.7	5.5	.3					.3	4.8	.3	3.3			83.7												
SW	2.8	8.4						.6	10.5	.4	5.6			75.5												
WSW	5.0	10.7						1.1	7.1	.4	7.8			72.6												
W	5.2	12.1						1.0	4.2		8.2			74.8												
WNW	4.7	8.9	.4					.8	3.1		2.7			82.1												
NW	5.8	7.4						.3	2.9		2.9			82.5												
NNW	5.1	9.2	.6					.6	3.8		2.9			82.1												
VARIABLE																										
CALM	<del>2.8</del>	<del>4.8</del>	<del>1.2</del>					<del>.5</del>	<del>1.6</del>	<del>.5</del>	<del>2.0</del>			<del>89.2</del>												
TOTAL	783	868	57					61	461	26	399			12343												
% TOTAL	5.4	5.9	.4					.4	3.2	.2	2.7			84.5												
TOTAL NUMBER OF OBSERVATIONS															14,607											

## PART B PRECIPITATION, SNOWFALL & SNOW DEPTH

This portion of the Uniform Summary presents in two sets of tables, the daily amounts and extreme values of the following:

PRECIPITATION	DERIVED FROM DAILY OBSERVATIONS
SNOWFALL*	DERIVED FROM DAILY OBSERVATIONS
SNOW DEPTH	DERIVED FROM DAILY OBSERVATIONS

1. The first table for each of the above presents the percentage frequency of various daily amounts, by month and annual, all years combined. The percentage of days with measurable amounts is also computed monthly and annually. Also shown for the precipitation and snowfall tables, are the monthly mean amounts, annual mean amounts (sum of monthly mean amounts), and the extreme monthly amounts (greatest and least). The latter statistics above are not presented for the snow depth summary since they would have limited use and may be misleading.

2. The second set of tables for each of the above presents the extreme daily amounts by individual year and month for the entire period of record available. Also provided are the means and standard deviations for each month and annual (all months). The extremes for a month are not printed nor used in computations if one or more observations are missing.

NOTE: Snow depth was recorded and punched at various hours during the period available from U. S. operated stations. The periods and hours used in the snow depth summary vary by service and period as follows:

Air Force Stations	From beginning of record thru 1945	Snow depth at 0800 LST
	Jan 46-May 57	Snow depth at 1230 GCT
	Jun 57-present	Snow depth at 1200 GCT
U. S. Navy and Weather Bureau Stations	From beginning of record thru Jun 52	Snow depth at 0030 GCT
	Jul 52-May 57	Snow depth at 1230 GCT
	Jun 57-present	Snow depth at 1200 GCT

\* Hail was included in snowfall occurrence in the summary of the day observation prior to Jan 1956,

# DAILY AMOUNTS

PERCENTAGE FREQUENCY OF  
PRECIPITATION  
(FROM DAILY OBSERVATIONS)

42215 STATION EUTENNA, OKINAWA STATION NAME 60-77 YEARS

15722 Daily Amounts Jan. 1969

	AMOUNTS (INCHES)														PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
	PRECIP.	NONE	TRACE	01	.02-.05	.06-.10	.11-.25	.26-.50	.51-1.00	1.01-2.50	2.51-5.00	5.01-10.00	10.01-20.00	OVER 20.00			MEAN	GREATEST	LEAST
SNOWFALL	NONE	TRACE	01-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-13.4	15.5-25.4	25.5-50.4	OVER 50.4						
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120						
JAN	34.1	15.7	5.8	11.1	6.9	10.7	6.5	6.0	2.8	.4				50.2	496	4.70	12.15	1.07	
FEB	38.8	14.4	5.7	10.9	5.7	12.3	5.4	3.8	2.6	.5				46.8	423	3.61	9.58	1.23	
MAR	37.7	14.1	5.5	10.2	6.0	12.2	5.2	6.0	2.5	.7				48.1	403	4.84	11.39	.80	
APR	50.0	14.2	2.7	6.9	4.9	6.4	4.9	5.8	3.8	.4				35.8	450	4.72	9.82	.83	
MAY	36.5	13.5	3.4	7.7	6.0	6.9	7.3	7.7	7.7	3.4				50.0	496	10.75	27.19	.71	
JUN	35.1	13.7	3.1	5.9	6.3	7.5	6.3	8.4	9.6	3.3	.8			51.2	510	12.53	22.42	6.21	
JUL	45.2	14.7	3.9	9.5	4.7	7.0	3.9	3.9	3.6	2.3	1.3			40.1	558	9.13	21.64	.59	
AUG	39.8	8.9	4.2	10.2	5.9	9.5	8.2	6.1	4.6	1.9	.6	.2		51.2	527	8.90	21.30	2.65	
SEP	39.1	12.4	4.3	11.7	7.4	10.2	6.3	3.1	4.1	1.5				48.5	540	5.91	13.63	1.72	
OCT	42.1	19.2	3.4	8.5	4.4	8.5	5.5	3.8	2.8	1.5	.2			38.7	527	5.39	13.28	.16	
NOV	47.5	15.0	4.6	10.0	4.0	7.5	4.6	4.4	1.9	.4	.2			37.5	480	3.68	10.25	1.46	
DEC	39.3	15.0	4.0	12.1	5.1	9.1	4.6	7.4	2.5	.9				45.7	527	5.10	9.92	.90	
ANNUAL	40.4	14.2	4.2	9.6	5.6	9.0	5.7	5.5	4.0	1.4	.3	.0		45.3	5937	79.26			

NAYWEASERVCOM





# DAILY AMOUNTS

PERCENTAGE FREQUENCY OF  
SNOW DEPTH  
(FROM DAILY OBSERVATIONS)

42215 STATION EUTEMA, OKINAWA 60.77 YEARS

AMOUNTS (INCHES)															PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
PRECIP.	NONE	TRACE	.01	.02-.05	.06-10	.11-.25	.26-.50	.51-1.00	1.01-2.50	2.51-5.00	5.01-10.00	10.01-20.00	OVER 20.00	MEAN			GREATEST	LEAST	
SNOWFALL	NONE	TRACE	0.1-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-25.4	25.5-50.4	OVER 50.4						
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120						
JAN	100.0													496					
FEB	100.0													423					
MAR	100.0													403					
APR	100.0													450					
MAY	100.0													496					
JUN	100.0													510					
JUL	100.0													558					
AUG	100.0													527					
SEP	100.0													540					
OCT	100.0													527					
NOV	100.0													510					
DEC	100.0													527					
ANNUAL	100.0													5967					

**PRECIPITATION**  
FROM DAILY OBSERVATIONS

STATION	STATION NAME	YEARS
42215	FUTENA, OKINAWA	60-77

62-77

YEARS

24 HOUR AMOUNTS IN INCHES

[illegible]

NAVWEASERVCOM

5723 Extreme Values Jan 1969



YEARS

PRECIPITATION  
(FROM DAILY OBSERVATIONS)

24 HOUR AMOUNTS IN INCHES  
/BASED ON LESS THAN FULL MONTHS/

[illegible]

# EXTREME VALUES

SNOWFALL  
(FROM DAILY OBSERVATIONS)

42215 STATION FUTEHA, OKINAWA 60-77 YEARS

## 24 HOUR AMOUNTS IN INCHES

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
62	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
63	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
64	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
65	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
66	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
67	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
68	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
69	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
72	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
73	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
74	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
75	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
76	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
77	.0	TRACE	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE
MEAN	.00	TRACE	TRACE	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
S. D.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL OBS.	496	423	403	450	496	510	558	527	540	527	510	527	5967

**SNOWFALL**  
FROM DAILY OBSERVATIONS

STATION	STATION NAME	YEARS
42215	FUTEMA, OKINAWA	60-77

24 HOUR AMOUNTS IN INCHES  
/BASED ON LESS THAN FULL MONTHS/

[illegible]

NAVWEASERVCOM



SNOW DEPTH  
(FROM DAILY OBSERVATIONS)

STATION	STATION NAME
42215	FUTENA, OKINAWA

YEARS

DAILY SNOW DEPTH IN INCHES

[illegible]

NAVWEASERVCOM

SNOW DEPTH  
(FROM DAILY OBSERVATIONS)

STATION	STATION NAME
42215	FUTEMA, OKINAWA

60-77

YEARS

DAILY SNOW DEPTH IN INCHES  
/BASED ON LESS THAN FULL MONTHS/[illegible]

NAVWEASERVCOM

NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

42215

FUTEMA, OKINAWA

STATION

STATION NAME

JANUARY

MONTH

1961-1966 1968-1977

YEARS

FEBRUARY

MONTH

# DAILY EXTREME AMOUNTS

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	1.35	34	1973			
2	1.02	26	1977			
3	1.91	49	1965			
4	0.29	7	1974			
5	0.69	18	1973			
6	0.74	19	1968			
7	0.87	22	1973			
8	0.55	14	1962			
9	0.37	9	1970			
10	3.28	83	1972			
11	0.19	5	1963			
12	0.08	2	1977*			
13	0.15	4	1971			
14	1.20	30	1970			
15	1.97	50	1975			
16	0.77	20	1966			
17	0.77	20	1966			
18	2.00	51	1966			
19	0.94	24	1969			
20	1.28	33	1971			
21	1.51	38	1974			
22	0.66	17	1973			
23	1.92	49	1964			
24	1.02	26	1973			
25	4.55	116	1966			
26	1.11	28	1975			
27	2.38	60	1975			
28	0.87	22	1964			
29	0.76	19	1971			
30	0.78	20	1966			
31	0.29	7	1969			
Monthly	4.55	116	1966			

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.58	15	1969			
2	0.75	19	1975			
3	0.17	4	1976*			
4	1.10	28	1969			
5	1.25	32	1974			
6	0.85	22	1961			
7	0.34	9	1975			
8	0.35	9	1968			
9	0.58	15	1972			
10	0.62	16	1965			
11	1.05	27	1963			
12	0.55	14	1962			
13	0.41	10	1972			
14	1.58	40	1975			
15	0.26	7	1968			
16	0.77	20	1961			
17	0.32	8	1964			
18	0.93	24	1965			
19	1.48	38	1973			
20	1.42	36	1965			
21	0.27	7	1977			
22	3.03	77	1973			
23	0.35	9	1964			
24	0.47	12	1969			
25	1.58	40	1962			
26	3.68	93	1972			
27	1.02	26	1966			
28	0.40	10	1971			
29	0.11	3	1976			
30						
31						
Monthly	3.68	93	1972			

\* ALSO ON EARLIER YEARS

T - TRACE, AN AMOUNT TOO SMALL TO MEASURE

BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS



NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

42215

FUTEMA, OKINAWA

STATION

STATION NAME

MARCH

MONTH

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	1.07	27	1969			
2	3.51	89	1969			
3	1.41	36	1970			
4	0.37	9	1966	Y	Y	1977
5	0.36	9	1961			
6	0.36	9	1965			
7	0.31	8	1970			
8	1.60	41	1969			
9	0.84	21	1975			
10	1.18	30	1970			
11	1.75	44	1969			
12	0.87	22	1962			
13	0.78	20	1973			
14	3.28	83	1962			
15	0.92	23	1970			
16	0.62	16	1961			
17	0.17	4	1961			
18	0.21	5	1970			
19	0.17	4	1961			
20	2.72	69	1962			
21	0.70	18	1968			
22	0.76	19	1962			
23	0.84	21	1966			
24	0.86	22	1961			
25	1.39	35	1961			
26	2.22	56	1966			
27	2.00	51	1970			
28	0.77	20	1975			
29	3.16	80	1968			
30	0.92	23	1977			
31	0.88	22	1972			
Monthly	3.51	89	1969	Y	Y	1977

## DAILY EXTREME AMOUNTS

1961-1966 1968-1977

YEARS

APRIL

MONTH

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.91	23	1971			
2	0.25	6	1974			
3	0.69	18	1962			
4	1.47	37	1974			
5	0.09	2	1966			
6	0.98	25	1975			
7	3.03	77	1962			
8	2.17	55	1975			
9	1.87	47	1973			
10	0.39	10	1973			
11	0.64	16	1970			
12	0.10	3	1968			
13	1.79	45	1965			
14	1.20	30	1975			
15	0.84	21	1972			
16	0.62	16	1977			
17	0.58	15	1976			
18	2.46	62	1970			
19	1.87	47	1974			
20	0.50	13	1966			
21	2.13	54	1968			
22	0.30	8	1961			
23	1.06	27	1966			
24	Y	Y	1974*			
25	1.49	38	1974			
26	1.18	30	1961			
27	3.83	97	1975			
28	1.99	51	1974			
29	0.98	25	1965			
30	2.43	62	1966			
31	3.83	97	1975			
Monthly						

\* ALSO ON EARLIER YEARS

T - TRACE, AN AMOUNT TOO SMALL TO MEASURE

BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

# DAILY EXTREME AMOUNTS

STATION  
42215

STATION NAME  
FUTEMA, OKINAWA

YEARS  
1961-1966 1968-1977

MAY  
MONTH

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	2.79	71	1966			
2	1.07	27	1974			
3	1.39	35	1972			
4	0.91	23	1972			
5	1.10	28	1974			
6	2.04	52	1965			
7	1.81	46	1966			
8	4.38	111	1969			
9	2.81	71	1975			
10	1.60	41	1965			
11	0.73	19	1964			
12	4.46	113	1966			
13	1.72	44	1969			
14	4.95	126	1972			
15	2.22	56	1972			
16	1.90	48	1962			
17	0.83	21	1969			
18	3.17	81	1975			
19	4.09	104	1964			
20	2.82	72	1966			
21	4.44	113	1966			
22	1.36	35	1975			
23	1.64	42	1965			
24	3.16	80	1974			
25	3.29	84	1975			
26	1.59	40	1970			
27	3.01	76	1969			
28	0.93	24	1970			
29	4.25	108	1974			
30	2.82	72	1964			
31	4.17	106	1966			
Monthly	4.95	126	1972			

JUNE  
MONTH

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	3.16	80	1966			
2	4.04	103	1969			
3	0.77	20	1973			
4	1.68	43	1966			
5	1.95	50	1969			
6	7.29	185	1972			
7	4.63	118	1975			
8	4.11	104	1975			
9	2.92	74	1962			
10	2.13	54	1975			
11	2.40	61	1976			
12	2.05	52	1964			
13	1.91	49	1972			
14	3.66	93	1970			
15	4.02	102	1961			
16	5.52	140	1967			
17	0.68	17	1964			
18	2.30	58	1968			
19	1.92	49	1968			
20	2.47	63	1969			
21	2.32	59	1977			
22	2.65	67	1969			
23	1.80	46	1969			
24	1.23	31	1969			
25	0.93	24	1977			
26	0.98	25	1977			
27	1.73	44	1962			
28	1.34	34	1963			
29	1.11	28	1974			
30	1.91	49	1975			
31						
Monthly	7.29	185	1972			

\* ALSO ON EARLIER YEARS

T - TRACE, AN AMOUNT TOO SMALL TO MEASURE  
BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

STATION  
42215

STATION NAME  
FUTEMA, OKINAWA

1960-1977

YEARS

# DAILY EXTREME AMOUNTS

JULY

MONTH

AUGUST

MONTH

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	1.02	26	1975			
2	1.87	47	1966			
3	4.00	102	1975			
4	4.39	112	1974			
5	6.48	165	1974			
6	1.61	41	1966			
7	1.70	43	1976			
8	3.87	98	1976			
9	0.42	11	1975			
10	1.89	48	1970			
11	0.17	4	1972			
12	0.19	5	1967			
13	0.59	15	1972			
14	0.26	7	1961			
15	0.43	11	1963			
16	0.42	11	1973			
17	6.48	165	1973			
18	7.16	182	1973			
19	3.95	100	1967			
20	0.68	17	1964			
21	4.69	119	1961			
22	7.35	187	1972			
23	7.78	198	1961			
24	3.10	79	1972			
25	2.54	65	1972			
26	5.16	131	1960			
27	8.68	220	1964			
28	0.16	4	1973			
29	2.40	61	1977			
30	1.39	35	1976			
31	1.88	48	1971			
Monthly	8.68	220	1964			

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	4.84	123	1962			
2	1.15	29	1971			
3	2.52	64	1971			
4	8.35	212	1965			
5	11.22	285	1965			
6	0.47	12	1965			
7	1.47	37	1965			
8	0.63	16	1969			
9	0.36	9	1966			
10	2.70	69	1961			
11	3.57	91	1975			
12	2.05	52	1975			
13	1.58	40	1960			
14	2.58	66	1966			
15	2.16	55	1968			
16	2.05	52	1970			
17	5.15	131	1964			
18	1.39	35	1960			
19	5.04	128	1964			
20	13.95	354	1969			
21	5.38	137	1977			
22	1.81	46	1966			
23	2.91	74	1977			
24	3.64	92	1974			
25	0.81	21	1975			
26	1.41	36	1961			
27	2.55	65	1975			
28	1.41	36	1968			
29	0.69	18	1971			
30	2.03	52	1968			
31	0.68	17	1968			
Monthly	13.95	354	1969			

\* ALSO ON EARLIER YEARS

T - TRACE AN AMOUNT TOO SMALL TO MEASURE

BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS



NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

42215

FUTEMA, OKINAWA

STATION

STATION NAME

1960-1977

YEARS

# DAILY EXTREME AMOUNTS

SEPTEMBER

MONTH

OCTOBER

MONTH

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.93	24	1968			
2	1.30	33	1966			
3	0.74	19	1973			
4	0.21	5	1969			
5	2.01	51	1971			
6	1.23	32	1974			
7	1.53	39	1973			
8	1.53	39	1976			
9	5.00	127	1976			
10	2.73	69	1973			
11	0.23	6	1961			
12	1.43	36	1977			
13	0.44	11	1970			
14	3.57	91	1961			
15	2.08	53	1966			
16	0.99	25	1973			
17	2.10	53	1960			
18	1.60	41	1960			
19	0.08	2	1963			
20	1.07	27	1973			
21	1.33	34	1973			
22	4.10	104	1966			
23	4.97	126	1966			
24	0.32	8	1973			
25	2.91	74	1977			
26	1.64	42	1964			
27	2.48	63	1963			
28	0.88	22	1963			
29	2.33	60	1964			
30	0.29	7	1971			
31						
Monthly	5.00	127	1976			

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	1.08	27	1962			
2	7.69	195	1961			
3	0.80	20	1961			
4	1.32	34	1975			
5	0.35	9	1977			
6	0.61	15	1961			
7	0.26	7	1964			
8	0.64	16	1964			
9	0.36	9	1960			
10	0.14	4	1960			
11	0.76	19	1964			
12	3.91	99	1974			
13	2.02	51	1964			
14	0.48	12	1975			
15	3.07	78	1976			
16	3.03	77	1961			
17	2.34	65	1970			
18	1.60	41	1967			
19	2.98	76	1975			
20	1.81	46	1975			
21	3.33	85	1975			
22	0.65	17	1960			
23	3.77	96	1976			
24	0.85	22	1967			
25	0.67	17	1963			
26	1.54	39	1967			
27	0.50	13	1967			
28	1.46	37	1965			
29	2.74	70	1971			
30	0.16	4	1977			
31	1.39	35	1974			
Monthly	7.69	195	1961			

\* ALSO ON EARLIER YEARS

T - TRACE AN AMOUNT TOO SMALL TO MEASURE

BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

42215

FUTEMA, OKINAWA

STATION

STATION NAME

NOVEMBER

MONTH

YEARS

1960-1977

DECEMBER

MONTH

# DAILY EXTREME AMOUNTS

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.41	10	1966			
2	0.32	8	1962			
3	0.85	22	1970			
4	0.25	6	1970			
5	0.48	12	1966			
6	3.22	82	1966			
7	0.35	9	1974			
8	1.03	26	1962			
9	1.94	49	1962			
10	1.81	46	1966			
11	1.11	28	1973			
12	1.56	40	1960			
13	1.46	37	1970			
14	7.10	180	1971			
15	0.84	21	1972			
16	0.97	25	1977			
17	2.64	67	1977			
18	0.36	9	1972			
19	0.81	21	1972			
20	0.42	11	1969			
21	0.58	15	1976			
22	1.27	32	1969			
23	0.97	25	1972			
24	0.27	7	1966			
25	0.83	21	1977			
26	0.44	11	1962			
27	0.17	4	1975			
28	0.78	20	1977			
29	1.29	33	1971			
30	1.90	48	1961			
31	7.10	180	1971			
Monthly						

DAY	PRECIPITATION GREATEST			SNOWFALL GREATEST		
	INCHES	MM	DATE	INCHES	MM	DATE
1	0.44	11	1962			
2	1.93	49	1963			
3	0.66	17	1974			
4	0.56	14	1968			
5	1.95	50	1972			
6	0.36	9	1972			
7	0.64	16	1972			
8	0.96	24	1964			
9	0.79	20	1964			
10	2.21	56	1963			
11	1.23	31	1960			
12	3.14	80	1970			
13	0.05	1	1963			
14	0.51	13	1975			
15	0.90	23	1973			
16	3.66	93	1964			
17	2.54	65	1962			
18	1.81	46	1974			
19	0.80	20	1972			
20	0.31	8	1975			
21	0.58	15	1975			
22	2.78	71	1972			
23	0.93	24	1971			
24	1.02	26	1971			
25	0.56	14	1970			
26	0.84	21	1974			
27	1.78	45	1962			
28	0.19	5	1960			
29	0.95	24	1971			
30	3.96	101	1971			
31	0.75	19	1961			
Monthly	3.96	101	1971			

\* ALSO ON EARLIER YEARS

T - TRACE, AN AMOUNT TOO SMALL TO MEASURE

BLANK UNDER SNOWFALL INDICATES NO SNOWFALL FOR PERIOD OF RECORD

DIRNAVOCEANMET-SMOS

## PART C

## SURFACE WINDS

Presented in this part are various tabulations of surface winds as follows:

1. Extreme Values - Peak Gusts: Derived from daily observations and presented by individual year and month for the entire period of record available. Speeds are presented in knots, while directions are given in 16 compass points from the beginning of record through 1963, and in tens of degrees starting in January 1964. When 90% or more of the daily observations of peak gust wind data are available for a month, the extreme is selected and printed. These values are then used to compute means and standard deviations for the entire period. Every month of a year must have valid observations present before the ALL MONTHS value is selected for that year. Means and standard deviations are computed when four or more values are present for any column. A supplementary list of Peak Gusts by year-month with < 90% observations reported is also provided.

NOTE: According to ~~COMBINATION~~ specifications, "peak gust data are recorded only at stations with continuous instantaneous wind-speed recorders."

2. Bivariate percentage frequency tabulations: Derived from 3-hourly observations, these tabulations are a percentage frequency of wind directions to 16 compass points and calm by wind speeds (knots) in increments of Beaufort classifications. Percentages are shown by both direction and speed, and in addition the mean wind speed for each direction.

A separate category is provided on the form for variable winds, which are reported in some data sources. In these data where light and variable winds are reported with no directions but with speeds given, the speeds will be summarized in the appropriate groups opposite the column headed VARBL.

- a. Three tables are prepared for all surface winds included, and for all years combined as follows:
  - (1) Annual - all hours combined
  - (2) By month - all hours combined
  - (3) By month - by standard 3-hour groups
- b. A separate annual table is also presented for surface winds meeting the following ceiling and visibility conditions: INSTRUMENT CLASS: Ceiling 200 through 1400 feet inclusive with visibility equal to or greater than 1/2 mile, and/or visibility 1/2 through 2-1/2 miles inclusive with ceiling equal to or greater than 200 feet.



2 [ ]

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

61-77

YEARS

# DAILY PEAK GUSTS IN KNOTS

[illegible]

NAVWEASERVCOM

## 2

STATION	STATION NAME
42215	RUTEN, OKINAWA

61-77

YEARS

DAILY PEAK GUSTS IN KNOTS  
/BASED ON LESS THAN 90% OBSERVATIONS FOR MONTH/

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
60													WINDS DAYS
61													WINDS DAYS
63													WINDS DAYS
66													WINDS DAYS
69													WINDS DAYS

NAVWEASERVCOM

5723 Extreme Values Jan 1969

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

00  
HOURS (L.S.T.)

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	3.2	5.2	1.9								12.3	7.1
NNE	3.9	9.7	4.5									18.1	5.3
NE	2.6	8.4	1.9	.6								13.5	5.2
ENE	7.7	6.5	1.3									15.5	3.6
E	4.5	1.9	3.9									10.3	5.0
ESE	.6	.6	1.3	.6								3.2	7.2
SE	.6	.6	1.9		.6							3.9	8.5
SSE			1.3	.6								1.9	10.7
S	.6			.6								1.3	7.5
SSW		.6										.6	4.0
SW													
WSW													
W		.6		.6								1.3	10.0
WNW													
NW		.6	.6	3.9								5.2	11.4
NNW			2.6	3.2								5.8	10.6
VARBL													
CALM												7.1	
	22.6	32.9	24.5	12.3	.6							100.0	5.8

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATION(S))

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

03  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	2.6	5.2	1.3								10.3	7.3
NNE	6.5	5.2	3.9									15.5	4.9
NE	3.2	9.7	3.2									16.1	4.8
ENE	5.8	4.5	1.9									12.3	4.2
E	3.2	1.9	1.9	.6								7.7	5.6
ESE	.6	1.3	1.9									3.9	6.5
SE	1.3	.6	1.9	.6								4.5	7.1
SSE			.6	.6	.6							1.9	14.0
S			.6									.6	7.0
SSW													
SW													
WSW													
W													
WNW	.6	.6	.6	.6								2.6	7.8
NW		.6	2.6	1.3	.6							5.2	11.3
NNW	.6	.6	2.6	2.6								6.5	10.3
VARBL													
CALM												12.9	
	23.2	27.7	27.1	7.7	1.3							100.0	5.6

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENHA, OKINAWA

STATION NAME

73-77

YEARS

JAN

MONTH

ALL WEATHER

CLASS

06

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.6	2.6	5.8	2.6								13.5	7.5
NNE	1.9	4.5	1.9	.6								9.0	5.3
NE	5.2	7.7	3.2	.6								16.8	5.2
ENE	7.1	3.9	1.3									12.3	3.5
E	4.5	4.5	1.9	1.9								12.9	6.0
ESE	1.3	1.3	1.3	.6								4.5	5.7
SE	2.6		1.9									4.5	5.3
SSE		.6	1.9									2.6	7.8
S					.6							.6	18.0
SSW		.6										.6	5.0
SW													
WSW													
W													
WNW			.6	.6								1.3	12.0
NW			1.9	1.3								3.2	10.0
NNW		1.3	3.9	6.5								11.6	11.2
VARBL												6.5	
CALM												100.0	6.2
	25.2	27.1	25.8	14.8	.6								

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENHA, OKINAWA

STATION NAME

73-77

YEARS

JAN

MONTH

09

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.6	7.1	3.9	4.5								18.1	7.6
NNE	4.5	5.8	5.2									15.3	5.3
NE	4.5	2.6	5.2									12.3	5.3
ENE	3.9	5.8	1.9	1.3								12.9	5.4
E	3.2	2.6	3.9	1.3								11.0	6.7
ESE	.6	.6	.6	.6	.6							3.2	9.8
SE	1.9	.6	1.3	.6								4.5	5.6
SSE	.6	1.9										2.6	4.5
S	.6		.6									1.3	5.5
SSW													
SW													
WSW													
W													
WNW			.6	.6	1.3							2.6	14.0
NW			1.9	1.3	.6							3.9	11.8
NNW	.6	1.3	1.9	3.9								7.7	9.9
VARBL												4.5	
CALM													
	23.2	28.4	27.1	14.2	2.6							100.0	6.6

TOTAL NUMBER OF OBSERVATIONS

155

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

12  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	5.2	7.7	2.6								16.1	7.9
NNE	1.3	3.2	7.1	1.9								13.5	7.8
NE		1.3	5.2	1.3								7.7	8.8
ENE		4.5	2.6	.6								7.7	6.9
E		2.6	3.2	3.9								9.7	9.3
ESE		3.2	2.6	1.3		.6						7.7	9.3
SE			.6									.6	10.0
SSE		.6	1.9									2.6	8.0
S			2.6									2.6	8.3
SSW				.6								.6	14.0
SW													
WSW													
W													
WNW	.6		.6	1.3	.6							3.2	11.8
NW	.6	1.9	2.6	5.8								11.0	10.1
NNW		1.9	8.4	4.5								14.8	9.6
VARBL													
CALM												1.9	
	3.2	24.5	45.2	23.9	.6	.6						100.0	8.7

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77

YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

15  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		3.2	7.7	5.2								16.1	9.3
NNE	1.3	.6	6.5	1.9								10.3	8.5
NE	.6	2.6	3.9	.6								7.7	7.1
ENE	.6	2.6	3.9	.6								7.7	7.4
E	1.3	3.9	4.5	.6	.6							11.6	7.2
ESE		.6	3.2	2.6								6.3	10.3
SE		1.9										1.9	4.0
SSE													
S			1.3	1.3								2.6	10.8
SSW		.6										.6	5.0
SW		.6	1.3									1.9	8.0
WSW				.6								.6	13.0
W			.6									.6	8.0
WNW	.6			.6								1.3	8.0
NW		3.2	5.2	5.2								13.5	9.9
NNW	.6	3.2	5.2	7.7								16.8	9.7
VARBL													
CALM												.0	
	5.8	23.2	43.2	27.1	.6							100.0	8.8

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215

FUTENHA, OKINAWA

73-77

JAN

STATION

STATION NAME

YEARS

MONTH

18

ALL WEATHER

18

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.5	7.7	8.4	4.5								25.2	7.1
NNE	3.2	5.8	6.5	1.3								16.8	6.7
NE	1.3	3.9	4.5									9.7	6.0
ENE	1.3	3.2	4.5									9.0	6.0
E	.6	2.6	1.3	.6								5.2	6.3
ESE	1.9	.6	.6	1.3								4.5	6.4
SE	1.3	.6	2.6	.6								5.2	7.1
SSE	1.3		.6									1.9	5.0
S		1.3										1.3	4.5
SSW			.6									.6	7.0
SW			.6									.6	8.0
WSW		.6	.6									1.3	6.0
W	.6											.6	3.0
WNW	1.3		.6									1.9	4.0
NW			1.3	1.9	1.3							4.5	13.3
NNW		.6	3.2	5.8	.6							10.3	11.4
VARBL													
CALM												1.3	
	17.4	27.1	36.1	16.1	1.9							100.0	7.2

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

21  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.2	5.8	5.2	3.9								18.1	7.0
NNE	4.5	9.0	3.9									17.4	5.1
NE	3.9	7.7	1.9	.6								14.2	5.1
ENE	5.2	5.8	1.9	.6								13.5	4.7
E	1.9	1.9	1.3	.6								5.8	5.9
ESE	1.3	1.3	.6	.6								3.9	5.5
SE	1.3	.6	1.9		.6							4.5	7.7
SSE	.6	.6		.6								1.9	6.7
S		.6										.6	5.0
SSW		.6										.6	5.0
SW													
WSW													
W		.6										.6	6.0
WNW		.6		.6								1.3	9.5
NW		.6	.6	1.9								3.2	11.6
NNW		1.9	3.2	4.5								9.7	10.3
VARB													
CALM												4.5	
	21.9	38.1	20.6	14.2	.6							100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENHA, OKINAWA  
STATION NAME

73-77  
YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

ALL  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	2.1	4.7	6.1	3.3								16.2	7.6
NNE	3.4	5.5	4.9	.7								14.5	6.0
NE	2.7	5.5	3.6	.5								12.3	5.6
ENE	4.0	4.6	2.4	.4								11.4	4.9
E	2.5	2.7	2.7	1.2	.1							9.3	6.5
ESE	.8	1.2	1.5	1.0	.1	.1						4.7	7.9
SE	1.1	.6	1.5	.2	.2							3.7	6.7
SSE	.3	.5	.8	.2	.1							1.9	7.9
S	.2	.2	.6	.2	.1							1.4	8.3
SSW		.3	.1	.1								.5	6.7
SW		.1	.2									.3	8.0
WSW		.1	.1	.1								.2	8.3
W	.1	.2	.1	.1								.4	7.4
WNW	.4	.2	.4	.6	.2							1.8	9.9
NW	.1	.9	2.1	2.8	.3							6.2	10.8
NNW	.2	1.4	3.9	4.8	.1							10.4	10.3
VARB													
CALM												4.8	
	17.8	28.6	31.2	16.3	1.1	.1						100.0	6.9

TOTAL NUMBER OF OBSERVATIONS

1240

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENHA, OKINAWA  
STATION NAME

73-77  
YEARS

FEB  
MONTH

ALL WEATHER  
CLASS

00  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	5.0	2.8	2.1	1.4							12.1	8.6
NNE	5.0	3.5	.7									9.2	3.5
NE	4.3	3.5	1.4									9.2	4.4
ENE	5.7	1.4	1.4	1.4								9.9	5.0
E	1.4	2.8	1.4	2.1								7.8	7.7
ESE	1.4	.7	2.8	.7								5.0	7.1
SE	.7	6.4	1.4									8.5	5.4
SSE	1.4	2.1		.7								4.3	4.7
S	.7	2.8	.7	2.1								6.4	7.7
SSW			.7	1.4								2.1	10.3
SW			.7									.7	9.0
WSW					.7							1.4	12.5
W			.7										
WNW													
NW				1.4	.7							2.1	14.7
NNW	1.4		3.5	5.0	.7							10.6	10.3
VARBL												10.6	
CALM													
	22.7	27.7	18.4	17.0	3.5							100.0	6.2

TOTAL NUMBER OF OBSERVATIONS

141

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

FEB

MONTH

ALL WEATHER

CLASS

03

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	5.0	2.1	4.3	.7							13.5	8.3
NNE	2.8	7.1	2.1									12.1	4.6
NE	1.4	3.5	.7	.7								6.4	5.0
ENE	7.1	2.1	.7									9.9	3.1
E	2.8	2.8	1.4	1.4								8.3	6.2
ESE	1.4	1.4	1.4	1.4								5.7	6.9
SE		2.1	1.4	1.4								5.0	8.0
SSE	1.4	2.1	2.1									5.7	5.3
S	.7	2.1		.7								3.5	5.4
SSW		.7	1.4	2.8								5.0	10.9
SW			.7									.7	8.0
WSW			.7									.7	9.0
W													
WNW				.7								.7	14.0
NW				1.4	1.4							2.8	16.8
NNW	1.4	.7	2.1	2.8								7.1	9.4
VARBL													
CALM												12.8	
	20.6	29.8	17.0	17.7	2.1							100.0	6.0

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

FEB

MONTH

ALL WEATHER

CLASS

06

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	3.5	3.5	4.3	.7							13.5	9.2
NNE	5.0	5.0	.7	.7								11.3	4.6
NE	2.8	2.1		.7								5.7	5.1
ENE	2.1	3.5	1.4									7.1	4.4
E	3.5	5.7	.7	1.4								11.3	5.3
ESE		.7	2.1	1.4								4.3	9.2
SE	2.8	2.8										5.7	3.6
SSE	2.1	1.4	1.4	.7								5.7	6.1
S	.7	2.8	.7	1.4								5.7	7.1
SSW		.7	1.4	2.1								4.3	10.0
SW	.7			1.4								2.1	9.7
WSW												.7	6.0
W		.7										1.4	17.5
WNW				.7	.7							1.4	19.0
NW					1.4							7.8	13.5
NNW		.7	.7	5.0	1.4								
VABBL													
CALM												12.1	
	21.3	29.8	12.8	19.9	4.3							100.0	6.6

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215

STATION NAME  
FUTENMA, OKINAWA

73-77

YEARS

FEB

MONTH

09

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	2.1	7.8	2.8		.7						14.9	9.1
NNE	5.0	7.8	2.1	.7								15.6	5.0
NE	2.8	5.0	2.1	1.4								11.3	5.5
ENE	1.4	4.3	.7									6.4	4.9
E	1.4	1.4	2.8	2.8								8.5	8.4
ESE		.7	.7	2.8								4.3	10.7
SE		2.1	2.1	1.4								5.7	7.8
SSE	1.4	.7	1.4									3.5	5.2
S	.7	4.3	1.4	1.4		.7						8.5	8.3
SSW		.7	.7	1.4								2.8	10.0
SW			.7	.7								1.4	10.0
WSW	.7											.7	2.0
W			1.4	.7								2.1	10.3
WNW			.7		.7							1.4	13.0
NW													
NNW			2.8	3.5	2.1							8.5	13.5
VARB													
CALM												4.3	
	14.9	29.1	27.7	19.9	2.8	1.4						100.0	7.6

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215

STATION NAME  
FUTENMA, OKINAWA

73-77

YEARS

FEB

MONTH

ALL WEATHER

12

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		2.1	5.0	6.4	.7							14.2	10.9
NNE	1.4	2.8	3.5	.7								8.5	6.4
NE	.7	.7	2.1	2.8								5.7	9.8
ENE	.7	.7	4.3									5.7	7.4
E		1.4	1.4	2.1								5.0	9.9
ESE		1.4	5.7	1.4								8.5	9.0
SE	.7	.7	3.5	.7								5.7	8.0
SSE	.7	.7	2.8	1.4								5.0	9.4
S		1.4	1.4	1.4		.7						5.0	11.1
SSW				2.1	2.1							4.3	15.3
SW		1.4	1.4	2.1								5.0	10.3
WSW													
W		.7		.7								1.4	9.0
WNW		1.4		.7								2.1	8.0
NW		1.4	3.5	4.3	.7							9.9	11.4
NNW	.7	2.1	3.5	5.0	2.1							13.5	10.8
VARBL													
CALM												.7	
	3.5	19.1	38.3	31.9	5.7	.7						100.0	9.8

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS



# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

FEB

MONTH

ALL WEATHER

CLASS

15

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.4	2.8	7.1	.7							12.8	11.6
NNE	.7	2.1	2.8	.7								6.4	7.1
NE	.7	.7	4.3									5.0	8.1
ENE	.7	1.4	2.1	1.4								5.7	8.0
E	1.4	3.5	4.3	3.5								12.8	8.1
ESE	.7	.7	2.8	1.4								5.7	9.3
SE	.7	.7	2.1	.7								3.5	9.0
SSE	.7	.7	3.5									4.3	8.0
S			2.8	4.3								7.1	11.6
SSW				1.4								1.4	15.0
SW		.7	2.1	2.1	.7							5.7	11.6
WSW													
W		2.1	.7	.7								3.5	8.0
WNW		1.4										1.4	5.0
NW		2.1	1.4	2.1	1.4							7.1	10.8
NNW			5.7	9.9	1.4	.7						17.7	12.6
VARBL													
CALM												.0	
	4.3	17.7	37.6	35.5	4.3	.7						100.0	10.1

TOTAL NUMBER OF OBSERVATIONS

141

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

FEB

MONTH

ALL WEATHER

CLASS

21

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.1	7.8	3.5	7.1	2.1							22.7	9.1
NNE	5.0	3.5	2.8	.7								12.1	5.1
NE	2.8	5.7	1.4									9.9	4.9
ENE		3.5	.7									4.3	5.2
E		2.1	2.8	.7	.7							6.4	8.6
ESE		3.5	2.1		.7							6.4	7.8
SE	1.4	3.5	.7									5.7	5.1
SSE	2.8	.7	2.1									5.7	5.1
S		2.1	2.1	1.4								5.7	8.0
SSW		.7	.7									1.4	7.0
SW													
WSW			.7									.7	7.0
W			.7		.7							1.4	14.0
WNW		.7			.7							1.4	12.0
WW		.7	.7	1.4								2.8	11.0
NNW			2.1	1.4	.7							4.3	12.0
VARBL													
CALM												9.2	
	14.2	34.8	23.4	12.8	5.7							100.0	6.8

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

FEB  
MONTH

ALL WEATHER  
CLASS

ALL  
MOORE (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	4.1	4.4	4.8	1.1	.1						15.4	9.5
NNE	3.1	4.7	2.2	.5								10.5	5.2
NE	1.8	2.8	1.8	.7								7.1	5.9
ENE	2.3	2.6	1.7	.4	.1							7.0	5.4
E	1.4	2.3	2.4	2.1	.1							8.5	7.8
ESE	.6	1.4	2.5	1.2	.1							5.8	8.1
SE	.7	2.4	1.7	.6								5.4	6.6
SSE	1.2	1.2	2.0	.4								4.8	6.6
S	.6	2.2	1.5	1.7		.2						6.2	8.3
SSW		.4	.7	1.7	.3							3.0	11.6
SW	.1	.3	.9	1.1	.1							2.4	10.7
WSW	.1		.3									.4	6.5
W		.5	.4	.3	.3							1.5	10.0
WNW		.6	.2	.3	.4							1.4	10.6
NW	.1	.7	.8	1.4	.9							3.9	12.0
NNW	.5	.7	3.1	4.6	1.2	.1						10.3	11.6
VARBL													
CALM												6.4	
	13.5	27.0	26.6	21.7	4.4	.4						100.0	7.7

TOTAL NUMBER OF OBSERVATIONS

1128



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

2

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

MAR

MONTH

ALL WEATHER  
CLASS

00

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	4.5	2.0	3.9	.6							12.9	8.4
NNE	2.0	4.5		.6								7.7	4.9
NE	2.0	3.2	1.3									7.1	4.5
ENE	1.9	2.6	3.9	.6								9.0	6.1
E	2.0	1.3	4.5									8.4	5.7
ESE	1.3	1.9	2.6	1.3								7.1	7.1
SE	1.3	3.9	.6									5.8	4.6
SSE		2.6	1.9	.6								5.2	7.0
S	.6	1.9	2.6	.6								5.8	7.1
SSW		.6	.6	.6								1.9	10.0
SW		1.3		.6								1.9	7.0
WSW	.6											.6	3.0
W	.6		1.3									1.9	7.3
WNW		.6	.6									1.3	6.0
NW			1.3	.6								1.9	11.0
NNW		1.3	2.6	2.6								6.5	10.7
VARBL													
CALM												14.8	
	15.3	30.3	26.5	12.3	.6							100.0	5.8

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

MAR  
MONTH

ALL WEATHER  
CLASS

03  
HOURS (L.S.T.)

CONDITION

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	5.8	3.2	3.9	1.3							15.3	9.0
NNE	1.3	3.9	3.9									9.0	5.6
NE	.6	3.9	.6									5.2	4.9
ENE	3.2	2.6	1.9									7.7	4.8
E	2.6	2.6	3.9	.6								9.7	6.3
ESE	.6	2.6	1.9	.6								5.8	7.1
SE	1.3	2.6	1.3	.6								5.8	6.0
SSE	3.2	1.9	1.3									6.5	4.0
S	1.3	1.3	2.6	1.9								7.1	8.3
SSW		1.9	.6									2.6	5.8
SW	1.3	.6	.6									2.6	4.8
WSW													
W													
WNW		1.3										1.3	5.0
NW			1.3	1.3								2.6	10.8
NNW			1.9	2.6								4.5	11.9
VARBL													
CALM												14.2	
	16.8	31.0	25.2	11.6	1.3							100.0	5.9

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENNA, OKINAWA

STATION NAME

73-77

YEARS

MAR

MONTH

ALL WEATHER

CLASS

06

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	5.2	5.2	3.9								16.1	8.1
NNE		5.2	2.6									7.7	6.0
NE	5.2	1.9	1.3									8.4	3.3
ENE	1.9	2.6	1.3									5.3	4.8
E	1.9	5.2	2.6									9.7	5.7
ESE	1.3	1.9	2.6	.6								6.3	6.6
SE	1.9	4.5	1.9									8.4	5.2
SSE	.6	1.3	.6									2.6	5.5
S	1.9	3.2	1.3	1.3								7.7	6.2
SSW	.6	1.9	.6	.6								3.9	6.3
SW	.6		.6									1.3	5.5
WSW			1.3									1.3	9.0
W			.6									.6	7.0
WNW	.6											.6	3.0
NW				.6								.6	12.0
NNW		.6	2.6	3.2	.6							7.1	11.7
VARBL													
CALM												11.6	
	18.7	33.5	25.2	10.3		.6						100.0	5.8

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATION(S))

42215  
STATION

FUTENHA, OKINAWA

STATION NAME

73-77

YEARS

MAR

MONTH

ALL WEATHER

CLASS

09

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	5.2	7.1	3.2	.6							16.8	8.7
NNE	2.6	5.8	5.6	.6								14.8	5.9
NE	.6	4.5	2.6									7.7	6.0
ENE	.6	4.5	1.9									7.1	5.5
E	.6		1.9	1.9								4.5	9.0
ESE		2.6	4.5									7.1	7.2
SE		1.9	1.9	.6								4.5	8.1
SSE	1.3	1.9	3.2	.6								7.1	7.1
S		1.9	4.5	1.9								8.4	9.3
SSW	.6	1.9	1.9									4.5	6.1
SW		1.3	.6	.6								2.6	7.3
WSW		1.3	.6	.6								2.6	7.5
W			.6									.6	10.0
WNW			.6									.6	10.0
NW		.6										.6	4.0
NNW			3.9	3.2	.6	.6						8.4	12.5
VARBL													
CALM												1.9	
	7.1	33.5	41.9	13.5	1.3	.6						100.0	7.6

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

MAR

MONTH

12

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.3	11.0	4.5	.6							18.1	9.9
NNE	.6	1.3	2.6									4.5	6.9
NE	.6	1.9	2.6	1.3								6.5	8.0
ENE	.6	1.9	1.3	1.9								5.8	7.2
E		1.3	5.8	1.9	.6							9.7	9.5
ESE	1.9	.6	3.9	1.3	.6							8.4	7.8
SE		.6	3.2	1.3	.6							5.8	10.6
SSE			1.3	2.6								3.9	11.2
S		1.3	3.9	3.9	.6							9.7	11.2
SSW	.6		1.9	.6								3.2	8.8
SW		.6		1.3								1.9	9.3
WSW			3.9	1.3								5.2	10.0
W			1.3									1.3	9.0
WNW		.6	1.3									1.9	7.3
NW	.6		1.3	.6								2.6	8.3
NNW		.6	4.5	4.5	1.3							11.0	11.3
VARBL													
CALM												.6	
	5.8	12.3	49.7	27.1	4.5							100.0	9.4

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

MAR  
MONTH

ALL WEATHER  
CLASS

15  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		3.2	4.5	9.7		.6						18.1	10.6
NNE		.6	1.9									2.6	7.3
NE		.6	.6	1.3								2.6	9.5
ENE			3.9									3.9	8.8
E	.6	2.6	4.5	4.5	.6							12.9	9.7
ESE		3.2	4.5	1.3								9.0	7.8
SE		.6	2.6	1.9								5.2	9.9
SSE	.6	.6	.6	3.2	.6							5.8	10.9
S		.6	3.2	1.3								5.2	9.8
SSW			2.6	2.6								5.2	10.5
SW		.6	2.6	2.6								5.8	10.0
WSW			.6	.6								1.3	9.5
W		.6	.6	.6								1.3	10.0
WNW		.6	2.6									3.2	8.0
NW				2.6								2.6	13.5
NNW			9.0	3.9		1.3						14.2	11.8
VARL													
CALM												1.3	
	1.3	14.2	43.9	36.1	1.3	1.9						100.0	10.0

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

MAR  
MONTH

ALL WEATHER  
CLASS

18  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	5.2	11.6	7.7	1.3							26.5	9.7
NNE		1.9	3.9									5.8	7.1
NE	.6	.6	.6									1.9	5.7
ENE		1.9	2.6	1.3								5.8	8.3
E	1.9	5.2	5.2	1.9								14.2	6.8
ESE	.6	2.6	1.9									5.2	5.9
SE	.6	.6	2.6	1.9								5.8	9.0
SSE		1.9	1.3	1.9								5.2	8.4
S		1.3	3.9	1.3								6.5	8.2
SSW		.6	1.9									2.6	7.3
SW		.6	1.3	3.2								5.2	9.9
WSW		.6	.6									1.3	6.5
W		1.3										1.3	6.0
WNW	.6	1.3	.6									2.6	5.0
NW			1.3	.6								1.9	11.3
NNW		1.3	1.3	2.6	.6							5.8	12.0
VARBL													
CALM												2.6	
	5.2	27.1	40.6	22.6	1.9							100.0	8.2

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATION(S))

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

MAR  
MONTH

ALL WEATHER  
CLASS

21  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	3.9	3.2	3.2	1.3							13.5	8.9
NNE	3.2	7.1	1.3	.6								12.3	4.9
NE	1.3	3.9	1.9	.6								7.7	5.8
ENE	3.9	3.2	3.2									10.3	5.4
E	2.6	1.9	3.2									7.7	5.6
ESE	1.9	2.6	1.9	1.9	.6							9.0	7.8
SE	1.3		1.9									3.2	6.0
SSE	1.3	2.6	.6									4.5	4.4
S	.6	1.3	2.6	.6								5.2	7.0
SSW	.6		2.6	.6								3.9	8.3
SW		1.9	1.3									3.2	7.0
WSW	1.3			.6								1.9	6.3
W	.6		1.3									1.9	5.7
WRW													
NW			1.3	.6								1.9	11.7
NNW	1.3	.6	1.3	1.9	.6							5.8	9.9
VARBL													
CALM												7.7	
	21.9	29.0	27.7	11.0	2.6							100.0	6.3

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

42215  
STATION

FUYENMA, OKINAWA  
STATION NAME

73-77  
YEARS

MAR  
MONTH

ALL  
HOURS (L.S.T.)

ALL WEATHER  
CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	4.3	6.0	5.0	.7	.1						17.2	9.3
NNE	1.3	3.8	2.7	.2								8.1	5.8
NE	1.5	2.6	1.5	.4								5.9	5.6
ENE	1.5	2.4	2.5	.5								6.9	6.1
E	1.6	2.5	4.0	1.4	.2							9.6	7.3
ESE	1.0	2.3	3.0	.9	.2							7.3	7.3
SE	.8	1.9	2.0	.8	.1							5.6	7.3
SSE	.9	1.6	1.4	1.1	.1							5.1	7.3
S	.6	1.6	3.1	1.6	.1							6.9	8.5
SSW	.3	.9	1.6	.6								3.5	7.9
SW	.2	.9	.9	1.0								3.1	8.2
WSW	.2	.2	.9	.4								1.8	8.3
W	.2	.2	.6	.1								1.1	7.6
WNW	.2	.6	.7									1.5	6.5
NW	.1	.1	.8	.9								1.9	10.8
NNW	.2	.6	3.4	3.1	.4	.3						7.9	11.5
VARBL													
CALM												6.9	
	11.5	26.4	35.1	18.1	1.7	.4						100.0	7.4

TOTAL NUMBER OF OBSERVATIONS

1240

DIRNAVOCEANMET SMOS



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

APR  
MONTH

ALL WEATHER  
CLASS

00  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.7	3.3	2.7	2.0								10.7	6.6
NNE	.7	2.0	.7									3.3	4.8
NE	2.7	2.7										5.3	3.3
ENE	2.7	1.3										4.0	3.0
E	3.3	4.7	4.7	.7								13.3	6.0
ESE	2.0	2.0	4.7	.7								9.3	6.3
SE		2.0	1.3	1.3								4.7	7.7
SSE	4.0	4.0	8.0	.7								16.7	6.0
S	1.3	2.7	5.3	2.7								12.0	8.0
SSW	.7	.7	2.7	1.3	.7							6.0	9.7
SW				.7								.7	13.0
WSW													
W			1.3									1.3	8.5
WNW				.7								.7	12.0
NW		.7	.7									1.3	7.0
NNW			.7	.7								1.3	11.0
VARBL													
CALM												9.3	
	20.0	26.0	32.7	11.3	.7							100.0	6.0

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

42215  
STATION

FUTENNA, OKINAWA  
STATION NAME

73-77  
YEARS

APR  
MONTH

ALL WEATHER  
CLASS

03  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		2.7	.7	.7	.7							4.7	8.7
NNE	.7	2.0	2.0									4.7	5.7
NE	2.7	2.0	.7									5.3	3.5
ENE	1.3	2.0										3.3	4.0
E	2.7	4.7	3.3	.7								11.3	5.7
ESE	.7	3.3	4.0	.7								8.7	7.4
SE	2.0	4.0	.7	1.3								8.0	5.7
SSE	1.3	2.7	6.0	1.3								11.3	7.6
S	4.0	4.7	6.0	2.0	.7							17.3	6.7
SSW	.7		1.3	1.3	.7							4.0	11.0
SW			.7	2.0	.7							3.3	13.0
WSW			.7									.7	8.0
W													
WNW													
NW		.7	.7									1.3	7.0
NNW	1.3	.7	.7	1.3								4.0	7.2
VARBL													
CALM												12.0	
	17.3	29.3	27.3	11.3	2.7							100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

5702 SURFACE WINDS JAN 78

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

APR  
MONTH

ALL WEATHER  
CLASS

06  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.3	2.0	1.3	.7							5.3	10.5
NNE	.7	.7	1.3									2.7	5.5
NE	3.3		.7									4.0	3.2
ENE	4.0	3.3	.7	.7								8.7	4.5
E	1.3	3.3	3.3		.7							8.7	6.8
ESE	.7	.7	4.0	.7								6.0	7.3
SE	3.3	6.0	2.7	.7								12.7	5.5
SSE	3.3	6.0	2.0	1.3								12.7	5.5
S	1.3	2.7	6.0	2.7								12.7	8.1
SSW	.7	3.3	1.3	.7								6.0	7.4
SW	.7	.7	1.3	.7								3.3	8.4
WSW			.7	.7								1.3	12.0
W			.7									.7	10.0
WNW	.7											.7	2.0
NW	.7	.7	2.7	.7								4.7	8.1
NNW			.7									.7	7.0
VARB													
CALM												9.3	
	20.7	28.7	30.0	10.0	1.3							100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

150



# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

APR  
MONTH  
09  
HOURS (L.S.T.)

73-77  
YEARS

ALL WEATHER  
CLASS

CONDITION

SPEED (KNOTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	.7	1.3	4.0									6.0	7.7
NNE	.7	1.3	.7	1.3								4.0	7.2
NE	1.3	4.0	2.7									6.0	6.3
NNE	.7	2.0	2.7	2.0								7.3	8.5
E	.7	2.0	4.7	2.0								9.3	8.4
ESE		.7	2.0	2.7								5.3	10.5
SE		.7	4.7	.7								6.0	8.3
SSE	1.3	1.3	4.0	.7								7.3	7.3
S	.7	4.0	10.7	5.3	.7							21.3	9.0
SSW	.7	1.3	3.3	2.7								8.0	9.1
SW		.7	2.0									2.7	7.8
WSW			1.3									1.3	7.0
W			2.0									2.0	8.7
WNW				.7								.7	12.0
NW	.7	1.3	.7	.7								3.3	6.6
NNW	.7	.7	3.3	.7								5.3	7.6
VARBL													
CALM												2.0	
	8.0	21.3	48.7	19.3	.7							100.0	8.1

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42213  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

APR  
MONTH

12  
HOURS (L.S.T.)

ALL WEATHER  
CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.7	4.0	2.7								7.3	10.0
NNE	.7	.7	2.0									2.7	6.8
NE	.7	.7	2.0	.7								4.0	7.5
ENE	.7	1.3	2.7	.7								5.3	7.4
E		2.7	10.0	4.0	1.3							18.0	9.0
ESE		.7	2.7	4.0								7.3	10.5
SE		.7	2.0	.7								3.3	8.8
SSE			6.0	1.3								7.3	10.1
S		.7	6.7	7.3								14.7	11.6
SSW			1.3	4.7	.7							6.7	12.5
SW		.7	2.7	1.3								4.7	9.6
WSW		.7	.7									1.3	7.5
W	.7	.7	1.3	2.0	.7							5.3	10.6
WNW		.7										.7	6.0
NW		.7	.7	.7								1.3	10.0
NNW	.7	.7	6.7	2.0								10.0	8.9
VARBL													
CALM												.0	
	3.3	10.7	51.3	32.0	2.7							100.0	9.8

TOTAL NUMBER OF OBSERVATIONS

150

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215

FUTENMA, OKINAWA

73-77

APR

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

15

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		2.0	2.7	4.0								8.7	10.1
NNE	.7		.7	.7								2.0	7.3
NE		.7										.7	6.0
ENE		1.3	1.3	1.3								4.0	8.7
E	.7	2.7	10.0	2.7								16.0	9.1
ESE	.7		4.7	4.0	.7							10.0	9.9
SE			5.3	.7								6.0	9.3
SSE			2.0	1.3								3.3	10.4
S		1.3	4.0	6.0	.7							12.0	10.8
SSW			2.0	6.0	.7							8.7	13.1
SW	.7		1.3	4.0								6.0	11.7
WSW			1.3	1.3								2.7	9.8
W			3.3									3.3	8.4
WNW		.7	.7									1.3	6.5
NW		2.7	2.7	.7								6.0	7.6
NNW		.7	4.0	4.0								8.7	10.0
VARB													
CALM												.7	
	2.7	12.0	46.0	36.7	2.0							100.0	9.8

TOTAL NUMBER OF OBSERVATIONS

150



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

APR  
MONTH

18  
HOURS (L.S.T.)

ALL WEATHER  
CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		2.7	6.7	5.3								14.7	9.1
NNE		1.3	3.3									4.7	6.9
NE			.7	.7								1.3	9.5
ENE		2.0	.7									2.7	6.0
E		4.0	10.0	2.7								16.7	8.6
ESE		3.3	4.0	1.3								8.7	8.3
SE		.7	3.3	.7								4.7	8.4
SSE		.7	2.7	2.0								5.3	9.3
S	.7	2.0	4.7	4.0								11.3	9.2
SSW		1.3	3.3	4.7								9.3	9.9
SW	.7	.7	4.0	1.3	.7							7.3	9.5
WSW													
W			2.0									2.0	8.0
WNW	.7	2.0	.7									3.3	5.0
NW	.7		.7	1.3								2.7	9.3
NNW	.7	.7	1.3	.7								3.3	7.0
VARBL													
CALM												2.0	
	3.3	21.3	48.0	24.7	.7							100.0	8.4

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

APR  
MONTH

ALL WEATHER  
CLASS

21  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	2.0	2.7	1.3								7.3	6.8
NNE	2.0	2.7	1.3	.7								6.7	5.9
NE	4.0	.7	.7									5.3	3.6
ENE	.7	2.0	1.3									4.0	5.7
E	2.0	4.0	5.3	1.3								12.7	7.3
ESE	.7	4.7	4.0	1.3								10.7	7.4
SE	1.3	.7	3.3	1.3								6.7	7.6
SSE	1.3	6.7	2.0									10.0	5.3
S	1.3	6.0	4.7	2.0								14.0	7.0
SSW		.7	2.0	1.3	1.3							5.3	11.6
SW		.7		1.3								2.0	10.0
WSW	1.3											1.3	2.0
W	.7		1.3									2.0	6.3
WNW		.7		.7								1.3	9.0
NW		2.0										2.0	5.0
NNW	.7			1.3								2.0	10.3
VARBL													
CALM												6.7	
	17.3	33.3	26.7	12.7	1.3							100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

150

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42219  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

APR

MONTH

ALL WEATHER

CLASS

ALL

MOORE (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	2.0	3.2	2.2	.2							8.1	8.6
NNE	.7	1.2	1.5	.3								3.8	6.2
NE	1.8	1.3	.9	.2								4.2	4.8
ENE	1.2	1.9	1.2	.6								4.9	6.1
E	1.3	3.5	6.4	1.7	.2							13.2	7.9
ESE	.6	1.9	3.7	1.9	.1							6.2	8.3
SE	.8	1.8	2.9	.9								6.5	7.2
SSE	1.4	2.7	4.1	1.1								9.2	7.0
S	1.2	3.0	6.0	4.0	.2							14.4	8.7
SSW	.3	.9	2.2	2.8	.5							6.7	10.6
SW	.2	.4	1.5	1.4	.2							3.7	10.2
WSW	.2	.1	.6	.2								1.1	8.0
W	.2	.1	1.5	.2	.1							2.1	8.9
WNW	.2	.5	.2	.2								1.1	6.8
NW	.2	1.0	1.1	.5								2.8	7.6
NNW	.5	.4	2.2	1.3								4.4	8.7
VARBL													
CALM												5.2	
	11.6	22.8	39.1	19.7	1.5							100.0	7.6

TOTAL NUMBER OF OBSERVATIONS

1200



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

MAY  
MONTH

ALL WEATHER  
CLASS

00  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.6	.6										3.2	3.0
NNE	1.9	.6										2.6	3.0
NE	4.5	.6	.6									5.8	3.2
ENE	2.6	1.3	2.6	1.3								7.7	6.3
E	2.6	3.2	5.8	3.2								14.8	7.7
ESE		3.9	6.5	3.9	.6							14.8	9.2
SE	.6	3.2	5.2	.6								9.7	6.9
SSE	.6	1.3	1.3									3.2	6.4
S	1.9	3.2	3.2	2.6								11.0	7.5
SSW	.6	1.3	2.6	1.9	.6							7.1	9.1
SW	.6		.6	.6								1.9	7.3
WSW			1.3									1.3	9.5
W		1.3										1.3	4.0
WNW		.6										.6	6.0
NW	.6		.6									1.3	5.0
NNW	.6		2.6									3.2	7.8
VARB													
CALM												10.3	
	20.0	21.3	32.9	14.2	1.3							100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

MAY

MONTH

ALL WEATHER

CLASS

03

HOURS (L.S.T.)

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.6	1.9									3.2	5.8
NNE	2.6	1.3										3.9	3.0
NE	3.2	1.9	.6									5.8	3.3
ENE	2.6	.6	.6	.6								4.5	5.0
E	1.3	3.9	6.5	.6	.6							12.9	7.8
ESE	.6	3.2	4.5	3.2								11.6	8.3
SE	1.3	1.9	3.9	1.3								8.4	7.4
SSE	2.6	2.6	1.9	.6	.6							7.7	5.7
S		1.3	5.8	.6	.6							8.4	9.0
SSW		1.3	2.6	2.6								6.5	10.1
SW		.6	4.5	.6	.6							6.5	9.7
WSW													
W	1.3	.6										1.9	3.0
WNW													
NW		2.6	.6									3.2	6.2
NNW		.6	1.3	.6								2.6	8.5
VARBL													
CALM												12.9	
	16.1	23.2	34.8	11.0	1.9							100.0	6.3

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

MAY  
MONTH

ALL WEATHER  
CLASS

06  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	2.6	2.6									7.1	5.9
NNE	1.3	2.6		.6								4.5	4.3
NE	1.9	1.9										3.9	4.0
ENE	3.2		1.9									5.2	4.3
E	.6	4.5	5.3	2.6								13.5	8.0
ESE		3.2	4.5	1.3								9.0	8.3
SE		2.6	5.8									8.4	7.3
SSE	1.3	1.3	1.3	.6								4.5	6.3
S	.6	3.9	6.5	1.3								12.3	7.6
SSW		.6	1.9	2.6								5.2	10.9
SW		.6	1.9	1.3								3.9	9.5
WSW	.6		.6									1.3	5.0
W	1.3	.6										1.9	2.7
WNW	.6	1.9										2.6	4.5
NW	.6		.6									1.3	4.5
NNW	.6	.6	.6									1.9	5.0
VARBL													
CALM												13.5	
	14.8	27.1	34.2	10.3								100.0	6.0

TOTAL NUMBER OF OBSERVATIONS

155



# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

MAY  
MONTH

ALL WEATHER  
CLASS

09  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	1.3	2.6	1.9	1.3								7.1	6.7
NNE	1.3	3.2	1.3									5.8	5.8
NE	.6	3.2	2.6									6.5	6.2
ENE	.6	1.3	3.2	1.9	.6							7.7	9.3
E		3.2	5.8	4.5	.6							14.2	9.7
ESE	.6	1.9	4.5	5.2								12.3	9.7
SE		.6	1.9	1.3								3.9	9.5
SSE			1.9									1.9	7.3
S	1.9	1.9	3.2	.6	.6							8.4	7.8
SSW		1.9	2.6	3.9								8.4	9.5
SW			1.9	3.9	.6							6.5	11.9
WSW		.6	.6	.6								1.9	9.0
W	1.9	1.9	1.3									5.2	4.5
WNW		.6	1.3									1.9	7.0
NW	.6		1.3									1.9	6.0
NNW		3.2										3.2	5.0
VARBL													
CALM												3.2	
	9.0	26.5	35.5	23.2	2.6							100.0	8.1

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

MAY  
MONTH

ALL WEATHER  
CLASS

12  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.6	1.9	.6								3.9	8.7
NNE	.6	.6	1.3									2.6	6.5
NE	.6		3.2	.6								4.5	8.1
ENE		3.2	1.3	3.9								8.4	9.2
E		1.9	7.1	7.7	.6							17.4	10.4
ESE		1.3	6.5	5.2								12.9	10.1
SE		.6	2.2	1.3								5.2	9.4
SSE			.6	.6								1.3	11.0
S		.6	2.6	1.3	.6							5.2	10.0
SSW			1.3	3.9	.6							5.8	12.9
SW			1.3	2.6								3.9	12.3
WSW		.6	3.2	3.2	.6							7.7	11.3
W		1.9	1.3	.6								3.9	7.2
WNW	.6	2.6	2.6	.6								6.5	7.0
NW	1.3	.6	2.6	1.3								5.8	7.4
NNW	.6	.6	1.9									3.2	7.6
VARBL													
CALM												1.9	
	4.5	15.5	41.9	33.5	2.6							100.0	9.4

TOTAL NUMBER OF OBSERVATIONS

155

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NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

MAY

MONTH

15

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.6	3.2	1.3								5.2	9.0
NNE			.6									.6	8.0
NE	1.3	.6	1.9	1.3								5.2	8.3
ENE		.6	2.6	3.2								6.5	10.2
E	.6	.6	7.1	7.7	.6							16.8	10.6
ESE		3.9	5.8	5.2								14.8	9.4
SE		.6	3.2	1.3								5.2	9.5
SSE				1.3	.6							1.9	15.7
S			1.9	1.3								3.2	9.6
SSW			.6	4.5	.6							5.8	13.4
SW			3.2	4.5	.6	.6						9.0	12.9
WSW		.6	1.9	1.9								4.5	10.7
W		2.6	3.2	.6								6.5	7.9
WNW		1.3	.6	.6								2.6	7.5
NW	1.3	1.9	1.9	.6								5.8	6.4
NNW	.6	1.3	2.6	1.9								6.5	8.2
VARBL													
CALM												.0	
	3.9	14.8	40.6	37.4	2.6	.6						100.0	9.9

TOTAL NUMBER OF OBSERVATIONS

155



# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

STATION 42215 FUTENMA, OKINAWA STATION NAME 73-77 YEARS MONTH MAY 18 HOURS (L.S.T.)

ALL WEATHER  
CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	.6	3.2									5.8	6.3
NNE	.6	1.3	1.9	1.3								5.2	7.4
NE		1.3	1.9	.6								3.9	7.5
ENE		1.3	2.6	1.3								5.2	9.1
E		3.9	13.5	6.5								23.9	9.4
ESE		2.6	3.9	3.9								10.3	8.8
SE	.6		2.6	.6								3.9	8.2
SSE		1.9	1.3	.6								3.9	7.2
S		1.3	1.9									3.2	7.4
SSW		.6	2.6	4.5								7.7	10.8
SW		.6	2.6	1.9								5.2	9.6
WSW		2.6		1.3								3.9	7.8
W	.6	3.2	2.6	.6								7.1	6.7
WNW		.6	1.3									1.9	8.3
NW	1.3	1.9	.6	.6								4.5	5.7
NNW		1.3	1.9	1.3								4.5	9.0
VARBL												.0	
CALM													
	5.2	25.2	44.5	25.2								100.0	8.4

TOTAL NUMBER OF OBSERVATIONS 155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

MAY

MONTH

21

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.3		.6								2.6	7.0
NNE	1.3	.6										1.9	3.0
NE	4.5	5.2	.6									10.3	4.1
ENE	3.2	3.2	.6	.6								7.7	4.7
E	1.3	3.2	5.8	5.8								16.1	9.0
ESE	1.3	5.2	5.8	4.5								16.8	8.3
SE	1.3	2.6	1.3	.6								5.8	5.7
SSE		1.9	1.9									3.9	6.5
S	1.9	2.6	3.2	.6								8.4	5.9
SSW	.6	1.3	1.9	3.2								7.1	9.6
SW	.6	1.9	1.9	1.9								6.5	8.2
WSW		.6	.6	.6								1.9	8.3
W	.6	.6										1.3	3.0
WNW	1.9											1.9	1.3
NW		.6	.6	.6								1.9	9.3
NNW	1.3		1.3	.6								3.2	7.6
VARBL													
CALM												2.6	
	20.6	31.0	25.8	20.0								100.0	6.8

TOTAL NUMBER OF OBSERVATIONS

155

AD-A060 538

NAVAL WEATHER SERVICE DETACHMENT ASHEVILLE N C  
SUMMARY OF METEOROLOGICAL OBSERVATIONS, SURFACE (SMOS), FUTENMA--ETC(U)  
JUL 78

F/G 4/2

UNCLASSIFIED

NL

2 OF 4

AD  
A060538





NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

MAY

MONTH

ALL WEATHER

CLASS

ALL

HOURE (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	1.2	1.9	.5								4.8	6.6
NNE	1.2	1.3	.6	.2								3.4	5.1
NE	2.1	1.9	1.5	.3								5.7	5.3
ENE	1.5	1.5	1.9	1.6	.1							6.6	7.4
E	.8	3.1	7.2	4.8	.3							16.2	9.2
ESE	.3	3.1	5.2	4.0	.1							12.8	9.0
SE	.5	1.5	3.4	.9								6.3	7.7
SSE	.6	1.1	1.3	.5	.1							3.3	7.2
S	.6	1.9	3.5	1.0	.2							7.3	7.9
SSW	.2	.9	2.0	3.4	.2							6.7	10.7
SW	.2	.5	2.3	2.2	.2	.1						3.4	10.6
WSW	.1	.6	1.0	1.0	.1							2.8	9.7
W	.7	1.6	1.0	.2								3.6	5.8
WNW	.4	1.0	.7	.2								2.3	6.2
NW	.7	1.0	1.1	.4								3.2	6.5
NNW	.5	1.0	1.5	.6								3.3	7.6
VARB													
CALM												5.6	
	11.8	23.1	36.3	21.9	1.4	.1						100.0	7.6

TOTAL NUMBER OF OBSERVATIONS

1240

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

JUN

MONTH

ALL WEATHER

CLASS

00

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3											1.3	2.0
NNE												.7	8.0
NE		.7	.7									.7	5.0
ENE	.7	1.3	1.3									3.3	5.4
E	2.7	2.0	4.7	4.0								13.3	8.2
ESE	1.3	1.3	.7									3.3	4.8
SE	2.0	4.7	3.3									10.0	5.2
SSE	.7	1.3	2.7	.7								5.3	7.6
S	.7	9.3	7.3	4.0								21.3	8.0
SSW	.7	2.0	6.7	10.7								20.0	10.2
SW	.7	.7	2.0	4.0								6.7	10.5
WSW	.7		.7	.7								2.0	7.3
W		.7										.7	4.0
WNW												.7	3.0
NW	.7												
NNW													
VARBL													
CALM												10.7	
	11.3	24.0	30.0	24.0								100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENNA, OKINAWA  
STATION NAME

73-77  
YEARS

JUN  
MONTH

ALL WEATHER  
CLASS

03  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.7										.7	4.0
NNE	.7											.7	2.0
NE	1.3		.7									2.0	4.7
ENE	.7		2.7									3.3	7.0
E	2.7	3.3	1.3	3.3								10.7	7.1
ESE		3.3	.7	.7								4.7	6.4
SE	1.3	2.7	.7									4.7	4.6
SSE	.7	6.7	.7	.7								8.7	5.5
S	1.3	2.0	9.3	3.3								16.0	9.0
SSW		3.3	8.0	11.3	.7							23.3	10.6
SW		1.3	5.3	5.3								12.0	10.6
WSW		.7										.7	4.0
W		2.0	.7									2.7	5.8
WNW	.7		.7									1.3	5.0
NW													
NNW													
VARBL													
CALM												8.7	
	9.3	26.0	30.7	24.7	.7							100.0	7.6

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77

YEARS

JUN  
MONTH

ALL WEATHER  
CLASS

06  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.7										.7	4.0
NNE	.7		.7									1.3	6.0
NE	2.7		.7									3.3	3.6
ENE	2.0	2.7	2.0	.7								7.3	6.2
E	1.3	2.0	4.7									8.0	6.8
ESE	.7		.7									1.3	6.0
SE	1.3	2.0	.7									4.0	4.5
SSE	2.0	3.3	3.3									8.7	5.5
S	1.3	2.7	9.3	3.3								16.7	8.6
SSW	.7	2.0	8.0	8.0								18.7	10.0
SW	2.0		3.3	5.3								10.7	9.6
WSW		.7	2.7	1.3								4.7	9.6
W	.7	.7	1.3	.7								3.3	6.8
WNW			.7	.7								1.3	11.5
NW													
NNW		1.3										1.3	4.0
VARBL													
CALM												6.7	
	15.3	18.0	38.0	20.0								100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

JUN

MONTH

ALL WEATHER  
CLASS

09

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.3	.7									2.0	5.7
NNE	.7	1.3										2.0	4.0
NE		.7	2.0									2.7	7.3
ENE		1.3	2.7	.7								4.7	9.1
E	.7	6.0	2.7									9.4	9.4
ESE	.7	.7	.7									2.0	5.3
SE		.7	2.7									3.4	7.6
SSE	.7	2.0	4.7	.7								8.1	7.4
S		3.4	3.4	7.4	.7							14.8	10.9
SSW			4.7	14.1	.7							19.5	12.1
SW		.7	3.4	5.4								9.4	11.1
WSW		2.0	3.4	1.3								6.7	8.6
W		2.7	2.0									4.7	6.9
WNW		2.0	.7									2.7	5.0
NW		.7										.7	4.0
NNW	1.3	2.0	1.3									4.7	5.0
VARBL													
CALM												2.7	
	4.0	21.5	38.3	32.2	1.3							100.0	8.9

TOTAL NUMBER OF OBSERVATIONS

149

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215

STATION NAME  
FUTENMA, OKINAWA

73-77

YEARS

JUN

MONTH

ALL WEATHER

CLASS

12

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.7										.7	6.0
NNE	.7	.7										1.3	3.0
NE		.7		.7								1.3	10.0
ENE		1.3	1.3	.7	.7							4.0	9.5
E		2.0	6.0	4.0								12.0	9.3
ESE		2.0	3.3	1.3								6.7	8.7
SE			2.0									2.0	8.0
SSE			.7	2.7								3.3	12.4
S		.7	5.3	5.3	.7							12.0	11.3
SSW			5.3	10.7	4.7							20.7	13.0
SW			5.3	6.0		.7						12.0	12.3
WSW			4.0	4.0								8.0	10.9
W	1.3	2.0	.7	1.3								5.3	6.3
WNW	.7		2.7									3.3	6.0
NW		1.3	2.0									3.3	7.0
NNW		2.0	.7									2.7	5.8
VARBL													
CALM												1.3	
	2.7	13.3	39.3	36.7	6.0	.7						100.0	10.2

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

JUN  
MONTH

ALL WEATHER  
CLASS

15  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7		1.3									2.0	5.3
NNE		.7										.7	5.0
NE	.7		1.3									2.0	5.7
ENE		.7		5.3								6.0	11.0
E	.7	2.7	8.0	4.0								15.3	8.8
ESE		.7	1.3	2.0								4.0	9.5
SE	.7		3.3									4.0	8.2
SSE			1.3	.7	.7							2.7	11.3
S	.7		5.3	3.3		.7						10.0	11.2
SSW		2.0	2.0	11.3	4.0							19.3	12.9
SW			7.3	6.7	.7							14.7	11.7
WSW		.7	5.3	2.0								8.0	9.7
W	2.0	.7	.7	1.3	.7							5.3	8.0
WNW		1.3	.7									2.0	6.0
NW		.7	1.3									2.0	7.7
NNW		.7										.7	4.0
VARBL													
CALM												1.3	
	5.3	10.7	39.3	36.7	6.0	.7						100.0	10.1

TOTAL NUMBER OF OBSERVATIONS

150

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

JUN  
MONTH

ALL WEATHER  
CLASS

18  
HOURS (L.S.T.)

CONDITION

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.3										2.0	4.0
NNE	.7											.7	3.0
NE		1.3	1.3									2.7	6.0
ENE	.7	.7	2.7	2.0								6.0	9.0
E		4.0	5.3	4.7								14.0	8.9
ESE		2.7	2.0	.7								5.3	7.1
SE	1.3	1.3	1.3									4.0	5.0
SSE	1.3	2.0	2.0									5.3	5.5
S	1.3	2.7	3.3	2.7	1.3							11.3	9.1
SSW	.7		2.7	13.3	.7							17.3	12.4
SW		2.0	6.7	6.7								15.3	10.6
WSW		2.7	2.7	1.3								4.0	10.0
W		2.0	2.0	.7								4.7	7.7
WNW													
NW	1.3	2.7										4.0	4.2
NNW	.7	1.3										2.0	4.0
VARBL													
CALM												1.3	
	8.7	24.0	32.0	32.0	2.0							100.0	8.7

TOTAL NUMBER OF OBSERVATIONS

150

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEAR

JUN  
MONTH

ALL WEATHER  
CLASS

21  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3											1.3	2.0
NNE	1.3	1.3	.7									3.3	4.2
NE	1.3		1.3									2.7	4.8
ENE	1.3	.7	2.7									4.7	6.3
E	.7	6.0	4.7	2.0								13.3	7.4
ESE	1.3	4.0	1.3									6.7	5.2
SE	2.0	1.3	3.3									6.7	5.7
SSE	.7	1.3	2.0									4.0	6.5
S	3.3	8.0	10.0	3.3	.7							25.3	7.5
SSW		.7	5.3	3.3								9.3	9.7
SW	.7	2.7	3.3	3.3								10.0	8.6
WSW	.7	2.7	1.3									4.7	5.7
W	.7											.7	2.0
WNW													
NW	.7											.7	2.0
NNW		.7										.7	6.0
VARBL													
CALM												6.0	
	16.0	29.3	36.0	12.0	.7							100.0	6.5

TOTAL NUMBER OF OBSERVATIONS

150



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENHA, OKINAWA

STATION NAME

73-77

YEARS

JUN

MONTH

ALL WEATHER

CLASS

ALL

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	.6	.3									1.3	4.2
NNE	.6	.5	.3									1.3	4.3
NE	.8	.4	.9	.1								2.2	5.6
ENE	.7	1.1	1.9	1.2	.1							4.9	8.1
E	1.1	2.3	5.1	3.1								12.0	8.3
ESE	.5	1.8	1.3	.6								4.3	6.9
SE	1.1	1.6	2.2									4.8	5.8
SSE	.8	2.1	2.2	.7	.1							5.8	7.0
S	1.1	3.6	6.7	4.1	.4	.1						15.9	9.1
SSW	.3	1.3	5.3	10.3	1.3							18.5	11.4
SW	.3	.9	4.6	5.3	.1	.1						11.3	10.7
WSW	.2	.8	2.5	1.3								4.8	9.1
W	.6	1.3	.9	.5	.1							3.4	6.8
WNW	.2	.4	.7	.1								1.3	6.3
NW	.3	.7	.4									1.4	5.4
NNW	.3	1.0	.3									1.5	4.9
VARBL													
CALM												5.1	
	9.1	20.9	35.4	27.3	2.1	.2						100.0	8.3

TOTAL NUMBER OF OBSERVATIONS

1199

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

JUL  
MONTH

ALL WEATHER  
CLASS

00  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N													
NINE			.6	.6								1.3	11.0
NE	.6	.6	.6		.6	.6						3.2	11.4
ENE	1.3											1.3	2.0
E	1.3	5.2	2.6	.6	.6	.6						11.0	7.6
ESE	3.9	5.8	1.9	1.3	.6			.6				14.2	7.5
SE	5.2	7.1	1.3									13.5	4.4
SSE	3.9	5.2	1.3			.6						11.0	5.7
S	2.6	4.5	1.9	2.6	.6							12.3	7.6
SSW		3.9	4.5	.6								9.0	7.1
SW		2.6	1.9	.6								5.2	7.0
WSW		.6	.6	.6	.6							2.6	10.8
W		.6										.6	6.0
WNW													
NW	.6											.6	3.0
NNW	.6											.6	3.0
VARBL													
CALM												13.5	
	20.0	36.1	17.4	7.1	3.2	1.9		.6				100.0	5.9

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENNA, OKINAWA  
STATION NAME

73-77  
YEARS

JUL  
MONTH

ALL WEATHER  
CLASS

03  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N				.6								.6	16.0
NNE			.6									.6	10.0
NE	.6			.6								1.3	7.0
ENE		.6	.6		.6							1.9	12.0
E	3.2	2.6	1.3	2.6	.6							9.7	7.1
ESE	3.9	2.6	.6	.6	.6							8.4	5.5
SE	7.7	6.5	1.9	.6	.6		.6					17.4	5.4
SSE	4.5	4.5	.6	.6								10.3	4.5
S	3.9	3.2	3.2	1.3								11.6	6.2
SSW	.6	3.2	1.9	1.3								7.1	7.5
SW		1.9	3.9	1.3								7.1	8.2
WSW	.6		.6	.6								1.9	8.0
W		1.3		.6								1.9	6.7
WNW													
NW	.6											.6	2.0
NNW		.6										.6	5.0
VARBL													
CALM												18.7	
	25.3	27.1	15.5	10.3	1.9		.6					100.0	5.2

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEAR

JUL

MONTH

06

HOURS (L.S.T.)

ALL WEATHER  
CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N				.6								.6	12.0
NNE	1.3		.6									1.9	3.3
NE	.6		.6	.6		.6						2.6	12.5
ENE		1.9										1.9	4.3
E	.6	3.2	1.9	2.6								8.4	8.6
ESE	4.5	3.9	1.3		.6							10.3	5.0
SE	5.2	4.5	1.3			.6						11.6	5.3
SSE	3.2	5.2	.6				.6					9.7	6.0
S	4.5	6.5	4.5	.6								16.1	5.3
SSW	.6	1.9	2.6		.6							5.8	7.6
SW	.6	1.3	1.9	.6								4.5	7.0
WSW		1.3	1.9		.6							3.9	8.7
W		.6	.6									1.3	6.5
WNW			.6									.6	10.0
NW		.6										.6	5.0
NNW													
VARBL													
CALM												20.0	
	21.3	31.0	18.7	5.2	1.9	1.3	.6					100.0	5.1

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

JUL

MONTH

09

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N				.6								.6	12.0
NNE	1.3	1.3										1.3	5.5
NE	.6	.6	.6									2.6	4.0
ENE		1.9	2.6	1.3				.6				7.1	10.5
E		4.5	3.9	2.6	.6							11.6	8.4
ESE	1.3	4.5	5.2	1.9								12.9	7.9
SE	1.3	5.2	2.6	.6	.6							10.3	7.0
SSE		1.9	3.9	.6			.6					7.1	9.3
S	2.6	1.3	7.7	3.9								15.5	8.4
SSW		1.9	3.2	1.9								7.1	9.5
SW			3.9	.6								4.5	8.7
WSW	.6	2.6	2.6	1.3								7.1	7.7
W	.6	.6										1.3	4.0
WNW		.6	.6									1.3	6.0
NW	1.3	.6		1.3								3.2	6.4
NNW		1.3				.6						1.9	10.7
VARBL													
CALM												4.5	
	9.7	29.0	36.8	16.8	1.3	.6	.6	.6				100.0	7.8

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEAR

JUL  
MONTH

ALL WEATHER  
CLASS

12  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N			.6		.6							1.3	14.0
NNE													
NE		.6	.6									1.3	6.0
ENE		.6	2.6	1.3	.6							5.2	9.9
E	.6	1.3	3.9	5.2	1.3	.6	.6					13.5	12.3
ESE	1.3	1.3	12.3	2.6	.6							18.1	8.9
SE		1.3	3.2	.6								5.2	8.4
SSE		.6	1.9	2.6								5.2	9.9
S	.6	1.9	2.6	5.8		.6						11.6	10.7
SSW	.6	1.9	3.2	3.9	.6							10.3	9.5
SW		.6	2.6	2.6								5.8	10.4
WSW		1.3	1.9	1.9	.6							5.8	10.2
W		1.3	1.9									3.2	7.2
WNW	1.3	2.6										3.9	4.7
NW	.6	1.9	.6									3.2	5.6
NNW		2.6				.6						3.2	8.8
VARBL													
CALM												3.2	
	5.2	20.0	38.1	26.5	4.5	1.9	.6					100.0	9.3

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

5702 SURFACE WINDS JAN 78

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

JUL

MONTH

15

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N				1.3								1.3	12.0
NNE													
NE			1.3									1.3	8.0
ENE		.6	.6		.6							1.9	11.7
E	.6	1.9	11.0	1.9	.6	.6		.6				17.4	10.0
ESE	.6	3.2	8.4	3.2								15.5	8.8
SE	.6	.6	5.8	1.3								8.4	8.2
SSE	.6	2.6	2.6	1.3	.6							5.2	10.5
S	.6	1.9	5.9	3.9		.6						11.0	10.2
SSW	.6	1.3	3.2	4.5								9.7	9.7
SW		.6	3.9	1.3								5.8	9.7
WSW		1.3	3.9	1.3								6.3	9.4
W	1.3	3.2	3.2									7.7	5.9
WNW	.6	2.6	1.9									5.2	5.8
NW		1.3				.6						1.9	11.7
NNW			.6									.6	10.0
VARBL													
CALM												.6	
	5.8	18.7	50.3	20.0	1.9	1.9		.6				100.0	9.1

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

JUL

MONTH

18

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6			.6								1.3	7.5
NNE		1.3	.6									1.9	7.0
NE													
ENE	1.3		1.9	.6	.6							4.3	9.0
E	1.3	3.2	11.0	1.3	.6		.6					18.1	8.6
ESE	.6	4.5	6.5	.6	1.3							13.5	8.7
SE	.6	1.9	3.9	1.3	.6							8.4	8.5
SSE	.6	1.9	2.6	1.3								6.5	8.1
S		3.9	5.8	1.3		.6						11.6	8.5
SSW			5.8	2.6								8.4	9.6
SW		.6	2.6	.6								3.9	9.7
WSW		1.3	1.3	.6								3.2	7.4
W	2.6	1.3	1.9									5.8	4.8
WNW	1.3	2.6				.6						4.5	7.1
NW		1.9										1.9	5.3
NNW		.6		.6								1.3	8.5
VARBL													
CALM												5.2	
	9.0	25.2	43.9	11.6	3.2	1.3	.6					100.0	7.8

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

JUL  
MONTH

ALL WEATHER  
CLASS

21  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6			.6								1.3	7.0
NNE		.6	.6									1.3	6.0
NE	.6				.6							1.3	10.5
ENE	.6	.6	1.3			.6						3.2	9.8
E	3.2	9.0	3.2	1.3	.6							17.4	6.1
ESE	2.6	5.8	1.9	1.3				.6				12.3	7.8
SE	2.6	7.1	1.9	1.9		.6						14.2	6.8
SSE	3.9	.6	.6									5.2	3.5
S	2.6	6.5	5.8	2.6								17.4	7.0
SSW	1.9	.6	4.5									7.1	6.5
SW		.6	1.9	.6								3.2	9.0
WSW		1.9										1.9	4.3
W		.6				.6						1.3	15.0
WNW													
NW	1.3											1.3	2.5
NNW	.6											.6	1.0
VARBL													
CALM												11.0	
	20.6	34.2	21.9	8.4	1.3	1.9		.6				100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

135



# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

42215 STATION FUTENMA, OKINAWA 73-77 JUL MONTH  
ALL WEATHER CLASS ALL HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	.2	.1	.1	.6	.1							.9	11.0
NNE	.2	.4	.4	.1								1.0	6.6
NE	.5	.2	.5	.2	.2	.2						1.7	8.9
ENE	.5	.8	1.2	.4	.3	.1		.1				3.4	9.4
E	1.4	3.9	4.3	2.3	.6	.2	.2	.1				13.4	8.6
ESE	2.3	4.0	4.8	1.5	.3			.2				13.1	7.8
SE	2.9	4.3	2.7	.7	.2	.2	.1					11.1	6.4
SSE	2.1	2.5	1.8	.8	.1	.1	.2					7.5	6.8
S	2.2	3.7	4.4	2.7	.1	.2						13.4	7.8
SSW	.6	1.9	3.6	1.9	.2							8.1	8.5
SW	.1	1.0	2.8	1.0								5.0	8.7
WSW	.2	1.3	1.6	.8	.2							4.1	8.6
W	.6	1.2	1.0	.1		.1						2.9	6.3
WNW	.4	1.0	.4			.1						1.9	6.1
NW	.6	.8	.1	.2		.1						1.7	6.0
NNW	.2	.6	.1	.1		.2						1.1	8.0
VARBL													
CALA												9.6	
	14.7	27.7	30.3	13.2	2.4	1.4	.4	.3				100.0	7.0

TOTAL NUMBER OF OBSERVATIONS 1240

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

AUG  
MONTH

ALL WEATHER  
CLASS

00  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9											1.9	2.3
NNE	1.3	1.3										2.6	4.0
NE	.6	1.3	.6	.6								3.2	5.6
ENE		1.3	1.9	.6								3.9	7.5
E	3.9	9.7	6.5	4.5	.6		.6					25.8	8.0
ESE	3.9	3.2	4.5	2.6			.6					14.2	7.3
SE	1.3	2.6	1.3	1.3								7.1	8.8
SSE	1.9	2.6		1.3								5.8	5.3
S	1.3	.6	1.3									3.2	5.2
SSW		1.9	.6	.6								3.2	7.4
SW	1.3	1.3	.6	.6								3.9	6.8
WSW		.6	.6	1.3								2.6	9.5
W			1.3									1.3	8.0
WNW		1.3	.6	1.9								3.9	10.2
NW	.6		1.3	1.3								3.2	9.8
NNW	1.3	.6										1.9	2.7
VARBL													
CALM												12.3	
	19.4	28.4	21.3	16.8	.6		1.3					100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77

YEARS

AUG  
MONTH

ALL WEATHER  
CLASS

03  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	1.9	.6									4.5	4.0
NNE	.6	.6	.6									1.9	5.3
NE			.6	.6								1.3	10.0
ENE		2.6	1.9									4.5	6.0
E	3.9	5.2	6.5	2.6	.6	.6						19.4	7.7
ESE	1.9	3.2	5.2	1.3								11.6	7.0
SE	2.6	2.6	3.2	.6	.6							9.7	7.0
SSE	1.9	1.9	.6	.6								5.2	5.1
S	.6	.6	.6	1.3								3.2	7.8
SSW	1.3	1.3		1.3								3.9	6.8
SW	1.3	.6		.6								2.5	5.5
WSW	.6	1.3	.6	.6								3.2	6.8
W			1.9	1.3	.6							3.9	11.5
WNW			1.3		.6							1.9	12.3
NW	1.3	.6			.6	.6						3.2	10.0
NNW		.6	.6									1.3	6.5
VARBL													
CALM												18.7	
	18.1	23.2	24.5	11.0	3.2	1.3						100.0	5.9

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENHA, OKINAWA

STATION NAME

73-77

YEARS

AUG

MONTH

06

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.0	1.3	1.3									3.2	4.8
NNE				.6								.6	11.0
NE	.6	.6	.6									1.9	5.3
ENE	1.3	2.6	.6	1.3								5.8	6.6
E	5.2	7.1	5.2	5.2	.6							23.9	7.8
ESE	1.3	2.6	1.3									5.2	5.1
SE	3.2	5.2	1.9	1.9								12.3	5.8
SSE	1.9	1.9	.6	.6								5.2	5.1
S	1.3	1.3		.6								3.2	5.8
SSW				1.3								1.3	14.5
SW	1.3	.6	1.3	1.3								4.5	7.4
WSW	.6	.6										1.3	3.0
W	.6	.6	1.9	.6								3.9	8.2
WNW		1.3	1.3	1.3	.6							4.5	10.6
NW				1.3								1.3	18.0
NNW		1.9										1.9	5.3
VARB													
CALM												20.0	
	18.1	27.7	16.1	14.8	2.6	.6						100.0	5.7

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENNA, OKINAWA

STATION NAME

73-77

YEARS

AUG

MONTH

09

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.9	.6	.6								3.9	6.0
NNE	1.3	.6										1.9	4.0
NE		1.9	1.9	.6								4.5	7.6
ENE	.6	3.2	2.6	.6	.6		.6					8.4	9.8
E		5.8	9.7	7.1	1.3							23.9	9.8
ESE	.6	2.6	5.8	3.2								12.3	8.8
SE		3.9	2.6	1.9								8.4	8.1
SSE		1.9	.6	.6	.6							3.2	9.2
S		2.6	.6									3.2	5.6
SSW	.6	.6	1.9		.6							3.9	8.7
SW		.6	1.9	1.9			.6					5.2	12.0
WSW		1.9	1.9									3.9	6.8
W	1.3	.6	.6	.6	.6	.6						4.5	11.1
WNW	.6	1.3	.6	.6	.6							3.9	8.7
NW	.6	.6	1.3	.6								3.2	7.6
NNW		.6	2.6	.6								3.9	8.8
VARBL													
CALM												1.9	
	6.5	31.0	35.5	18.7	4.5	.6	1.3					100.0	8.7

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

AUG  
MONTH

ALL WEATHER  
CLASS

12  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.3	1.3	.6								3.2	8.2
NNE		.6										.6	6.0
NE		.6		3.2								3.9	12.3
ENE			5.2	.6		.6						6.5	10.4
E	.6	1.9	12.9	7.7	.6							23.9	9.7
ESE			8.4	5.2	.6	.6	.6					15.5	12.0
SE	.6		3.9	1.3	1.3							7.1	11.1
SSE		.6	1.9	.6								3.2	8.2
S	.6		1.9	.6								3.2	7.6
SSW	.6		1.3	.6			.6					3.2	12.0
SW			.6	.6								1.3	9.5
WSW		1.3	3.2	1.9								6.5	9.6
W	.6		1.3	2.6		1.3						5.8	12.9
WNW		1.3	2.6	1.3	.6							5.8	9.7
NW			1.3	.6		.6						2.6	12.5
NNW	.6	1.9	3.2	.6								6.5	7.6
VARBL													
CALM												1.3	
	3.9	9.7	49.0	28.4	3.2	3.2	1.3					100.0	10.2

TOTAL NUMBER OF OBSERVATIONS

155



# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

AUG

MONTH

ALL WEATHER

CLASS

15

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N			.6	1.3								1.9	11.3
NNE	.6											.6	2.0
NE		.6	1.3	1.9		.6						4.5	12.6
ENE		.6	.6	1.9	.6							3.9	12.7
E		4.5	9.0	9.0	2.6							25.2	10.6
ESE	.6	.6	9.7	4.5								15.5	9.2
SE		.6	2.6	3.9	1.3							6.4	11.6
SSE				.6								.6	12.0
S		.6	3.9	.6								5.2	8.3
SSW		1.3	.6	1.3								3.2	8.4
SW	.6		.6	1.3			.6					3.2	13.4
WSW		.6	1.3	1.3								3.2	10.6
W		1.9	.6	2.6	.6	.6						6.5	11.6
WNW	.6	1.9	1.9	1.3	.6							6.5	8.9
NW		.6	5.8	.6								7.1	8.7
NNW		.6	1.9	.6			.6					3.9	13.2
VARBL												.6	
CALM													
	2.6	14.8	40.6	32.9	5.8	1.3	1.3					100.0	10.3

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENHA, OKINAWA  
STATION NAME

73-77

YEARS

AUG  
MONTH

ALL WEATHER  
CLASS

18  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6		2.6	1.3								4.5	8.1
NNE	1.3											1.3	3.0
NE	.6		3.2									3.9	8.3
ENE		1.3	1.3	2.6	.6	.6						6.5	12.8
E		8.4	11.0	7.1	.6							27.1	9.0
ESE		3.9	7.1	1.9	.6							13.5	9.1
SE	.6	1.3	1.9	.6		.6						5.2	9.4
SSE	1.3	2.6	1.3									5.2	5.4
S	.6	1.3	1.9		.6							4.5	8.3
SSW		.6	3.2	.6								4.5	8.9
SW					.6							.6	17.0
WSW		1.9	.6	1.9	.6							5.2	10.1
W		1.9	.6	.6		.6						3.9	9.8
WNW	.6	1.9	.6	1.3	.6							5.2	9.3
NW	1.3	.6	1.9	1.3	.6							5.2	8.7
NNW	.6		1.9									2.6	6.8
VARBL													
CALM												.6	
	7.7	25.8	39.4	19.4	5.2	1.9						100.0	6.9

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

AUG

MONTH

ALL WEATHER

CLASS

21

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	.6										1.9	3.3
NNE	1.3	.6										1.9	3.0
NE	.6		1.9									2.6	6.3
ENE		1.3	3.2	1.9	.6			.6				7.7	11.8
E	4.5	11.0	7.1	3.9	.6							27.1	6.9
ESE	2.6	3.2	5.2	2.6	.6							14.2	7.8
SE	1.9	.6	1.3	1.3	.6							5.8	8.4
SSE	2.6	1.3	1.3	.6								5.8	5.4
S	1.9	5.2	.6									7.7	4.6
SSW		.6	.6									.6	10.0
SW	.6		.6		.6							1.9	10.0
WSW		1.9	.6	1.3								3.2	9.6
W		.6	.6	.6								1.9	8.7
WNW			.6	.6	.6							1.9	13.3
NW		1.3	.6	1.3	1.3							4.5	11.7
NNW	.6	1.3	.6	.6								3.2	6.8
VARBL													
CALM												7.7	
	18.1	29.0	24.5	14.8	5.2			.6				100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

AUG  
MONTH

ALL WEATHER  
CLASS

ALL  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	.9	.9	.5								3.1	6.1
NNE	.8	.5	.1	.1								1.5	4.3
NE	.3	.6	1.3	.9		.1						3.2	8.9
ENE	.2	1.6	2.2	1.2	.3	.2	.1	.1				5.9	9.9
E	2.3	6.7	8.5	5.9	1.0	.2	.1					24.5	8.7
ESE	1.4	2.4	5.9	2.7	.2	.1	.1					12.7	8.7
SE	1.3	2.1	2.3	1.6	.5	.1	.1					8.0	8.5
SSE	1.2	1.6	.8	.6	.1							4.3	6.1
S	.8	1.5	1.4	.4	.1							4.2	6.5
SSW	.3	.7	1.0	.7	.1		.1					3.0	9.0
SW	.6	.4	.7	.8	.2		.2					2.9	9.6
WSW	.2	1.3	1.0	1.0	.1							3.5	8.8
W	.3	.7	1.1	1.1	.2	.4						4.0	10.8
WNW	.2	1.1	1.2	1.0	.6							4.2	9.9
NW	.5	.5	1.5	.7	.5	.2						3.9	10.0
NNW	.4	1.0	1.4	.3			.1					3.1	7.8
VARBL													
CALM												7.9	
	11.8	23.7	31.4	19.6	3.8	1.1	.6	.1				100.0	7.9

TOTAL NUMBER OF OBSERVATIONS

1240

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENNA, OKINAWA

73-77

STATION NAME

YEARS

SEP

MONTH

ALL WEATHER

CLASS

00

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	.7										2.0	3.3
NNE	.7	1.3	1.3									3.3	5.6
NE	3.3		.7									4.0	3.0
ENE	3.3	4.0	1.3	.7								9.3	5.1
E	4.0	4.7	3.3	1.3	.7							14.0	6.0
ESE	2.0	2.7	3.3	.7								8.7	6.6
SE	5.3	1.3	.7									7.3	3.3
SSE	4.0	2.0										6.0	3.3
S	2.7	3.3										6.0	3.6
SSW			.7									.7	8.0
SW			.7									.7	7.0
WSW				.7								.7	16.0
W	.7	.7		.7	.7		.7	.7				4.0	16.8
WNW		.7	.7									1.3	8.0
NW		.7	.7									1.3	7.0
NNW		.7										.7	6.0
VARBL													
CALM												30.0	
	27.3	22.7	13.3	4.0	1.3		.7	.7				100.0	4.0

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

SEP  
MONTH

ALL WEATHER  
CLASS

03  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	.7	.7									2.7	4.0
NNE	.7	1.3	.7	.7								3.3	7.0
NE	4.0	.7	.7									5.3	3.0
ENE	3.3	1.3	1.3	.7								6.7	5.1
E	2.7	2.0	1.3	2.0								8.0	7.0
ESE	2.7	4.7	3.3	.7								11.3	5.6
SE	3.3	1.3										4.7	2.6
SSE	4.0	1.3	.7									6.0	3.4
S	4.0	4.0										8.0	3.6
SSW		.7										.7	6.0
SW			.7	.7								1.3	10.5
WSW	.7			1.3								2.0	8.3
W				.7			.7					1.3	22.0
WNW		.7	.7	.7								2.0	9.0
NW													
NNW													
VARBL													
CALM												36.7	
	26.7	18.7	10.0	7.3			.7					100.0	3.5

TOTAL NUMBER OF OBSERVATIONS

150



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

SEP  
MONTH

ALL WEATHER  
CLASS

06  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7											.7	1.0
NNE	2.0	2.7										5.3	6.6
NE	4.0	1.3	1.3			.7						6.7	3.4
ENE	2.0	2.0	2.7									6.7	5.8
E	1.3	4.7	2.0									8.0	5.8
ESE	3.3	3.3	2.7	.7								10.0	5.7
SE	4.7	2.7										7.3	3.0
SSE	3.3	2.0										5.3	2.9
S	3.3	1.3	.7									5.3	3.3
SSW			.7	.7								1.3	11.0
SW		1.3		1.3								2.7	9.0
WSW			.7									.7	10.0
W			.7			.7						1.3	15.0
WNW	.7		.7	1.3								2.7	9.8
NW													
NNW	.7		.7									1.3	6.0
VARBL													
CALA												34.7	
	26.0	21.3	12.7	4.0		1.3						100.0	3.5

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

SEP

MONTH

ALL WEATHER

CLASS

09

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.3	2.7					.7				5.3	9.6
NNE	.7	2.7	2.7									6.0	6.2
NE	2.0	4.7	6.0									12.7	6.1
ENE	.7	5.3	1.3	2.7								10.0	7.7
E	.7	5.3	2.7	1.3								10.0	7.1
ESE	2.7	6.7	3.3	1.3								14.0	6.3
SE			2.0	.7								2.7	9.0
SSE	1.3	1.3	2.7									5.3	5.3
S	3.3	4.0										7.3	4.0
SSW	.7	.7	.7	.7	.7							3.3	8.6
SW	.7	2.0										2.7	4.0
WSW	1.3		1.3									2.7	5.5
W		1.3		1.3		.7						3.3	12.2
WNW	.7	.7	.7	.7								2.7	7.0
NW	2.7	.7										3.3	3.0
NNW	.7		1.3									2.0	6.0
VARBL													
CALM												6.7	
	18.7	30.7	27.3	8.7	.7	.7		.7				100.0	6.2

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

5702 SURFACE WINDS JAN 78

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

SEP

MONTH

ALL WEATHER

CLASS

12

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.3	2.0	.7								4.7	7.1
NNE			1.3	.7								2.0	8.7
NE		1.3	2.7	.7	.7							5.3	10.1
ENE	1.3	2.7	2.7	1.3								8.0	7.2
E	1.3	5.3	11.3	3.3	.7							22.0	8.2
ESE		3.3	4.0		.7							8.0	7.9
SE	1.3	3.3	3.3	.7								8.7	6.5
SSE		2.7		.7								3.3	5.8
S	1.3	2.7	2.7	.7								4.7	7.0
SSW		1.3	.7									2.0	6.0
SW		.7	.7	.7								2.0	9.3
WSW			.7	2.0								2.7	11.8
W			1.3	.7	.7							2.7	11.8
WNW	.7	5.3	1.3	1.3								8.7	6.4
NW	1.3	4.7	2.0	.7								8.7	5.7
NNW		2.7	2.0							.7		5.3	11.5
VARBL													
CALM												1.3	
	8.0	34.7	38.7	14.0	2.7					.7		100.0	7.7

TOTAL NUMBER OF OBSERVATIONS

150



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

SEP

MONTH

ALL WEATHER

CLASS

15

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		1.3	1.3	.7								3.3	8.2
NNE	.7	1.3	2.7	.7								5.3	8.0
NE	.7	.7	.7	.7								2.0	6.3
ENE		2.7	2.0	1.3	.7	.7						7.3	11.0
E		8.0	10.0	2.0								20.0	7.5
ESE	1.3	3.3	8.7	.7								14.0	7.3
SE		.7	4.7	.7								6.0	8.1
SSE	1.3	1.3										2.7	3.5
S		.7	.7									1.3	5.5
SSW	.7	.7	.7									2.0	5.7
SW		2.0										2.0	5.3
WSW	.7	2.0	3.3									6.0	6.8
W	.7	1.3	2.0	3.3								7.3	9.5
WNW		1.3	2.7									4.0	6.5
NW	.7	4.0	3.3						.7			8.7	9.2
NNW	.7	2.0	1.3	.7								4.7	6.9
VARBL													
CALM												3.3	
	7.3	33.3	43.3	10.7	.7	.7			.7			100.0	7.5

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77

YEARS

SEP  
MONTH

ALL WEATHER  
CLASS

18  
HOURS (L & T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.0	3.3	3.3	.7								9.3	6.2
NNE	.7	3.3	.7									4.7	3.0
NE		.7	2.7	.7								4.0	8.8
ENE	1.3	4.7	1.3	3.3								10.7	7.3
E	2.7	10.7	7.3	2.7								23.3	6.6
ESE	1.3	4.0	3.3									8.7	5.8
SE		2.7	2.0									4.7	5.9
SSE		1.3										1.3	5.5
S	.7	2.0										2.7	4.3
SSW	1.3	1.3	.7									3.3	4.6
SW		1.3										1.3	4.5
WSW	.7		.7									1.3	6.0
W		2.0	2.0		1.3	.7						6.0	11.0
WNW	2.0											2.0	2.3
NW	1.3	.7		.7					.7			3.3	12.8
NNW	2.0	3.3						.7				6.0	7.6
VARB													
CALM												7.3	
	16.0	41.3	24.0	8.0	1.3	.7		.7	.7			100.0	6.3

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

73-77

STATION NAME

YEARS

SEP  
MONTH

ALL WEATHER  
CLASS

21  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.7											2.7	2.3
NNE	3.3	1.3	2.0	.7								7.3	5.1
NE	4.0	2.0										6.0	3.0
ENE	5.3	4.0	2.7	.7								12.7	5.1
E	6.7	7.3	4.7	3.3								22.0	6.1
ESE	2.7	4.7	.7									8.0	4.2
SE	2.0	3.3										5.3	3.8
SSE	5.3	.7										6.0	2.6
S	2.7	1.3										4.0	3.2
SSW		1.3										1.3	5.0
SW	.7	.7										1.3	3.0
WSW				.7								.7	16.0
W	.7		1.3	.7		.7						3.3	10.8
WNW			.7					.7				1.3	21.0
NW			.7					.7				1.3	22.0
NNW		.7										.7	4.0
VARBL													
CALM												16.0	
	36.0	27.3	12.7	6.0		.7		1.3				100.0	4.6

TOTAL NUMBER OF OBSERVATIONS

150



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

42215

STATION NAME  
FUTENHA, OKINAWA

73-77

YEARS

SEP

MONTH

ALL WEATHER

CLASS

ALL

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	1.1	1.2	.2				.1				3.8	6.3
NNE	1.1	1.7	1.4	.3		.1						4.7	6.3
NE	2.2	1.4	1.7	.2	.1							5.7	5.4
ENE	2.2	3.3	1.9	1.3	.1	.1						8.9	6.7
E	2.4	6.0	5.3	2.0	.2							15.9	6.9
ESE	2.0	4.1	3.7	.5	.1							10.3	6.3
SE	2.1	1.9	1.6	.2								5.8	5.0
SSE	2.4	1.6	.4	.1								4.5	3.8
S	2.2	2.1	.5	.1								4.9	4.1
SSW	.3	.7	.5	.2	.1							1.8	6.7
SW	.2	1.0	.2	.3								1.7	6.6
WSW	.4	.2	.8	.6								2.1	8.4
W	.2	.7	.9	.9	.3	.3	.2	.1				3.7	12.3
WNW	.5	1.1	.9	.5				.1				3.1	7.6
NW	.7	1.3	.8	.2				.1	.2			3.3	8.3
NNW	.5	1.2	.7	.1				.1		.1		2.6	8.0
VARBL													
CALM												17.0	
	20.7	29.5	22.7	7.8	.8	.5	.2	.4	.2	.1		100.0	5.4

TOTAL NUMBER OF OBSERVATIONS

1200

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215

STATION NAME  
FUTENMA, OKINAWA

73-77

YEARS

OCT

MONTH

00

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	2.6	1.3		.6							5.8	6.3
NNE	3.9	2.6	3.9	.6								11.0	5.6
NE	6.5	4.5	1.3	.6								12.9	4.1
ENE	5.6	3.2	3.9	1.9								14.8	5.9
E	3.9	5.2	5.8	2.6								17.4	6.7
ESE	.6	3.2	2.6	1.3								7.7	7.1
SE		1.3	1.3									2.6	6.8
SSE	2.6											2.6	2.3
S		1.3	.6									1.9	6.0
SSW	.6			.6								1.3	8.0
SW	1.3											1.3	2.5
WSW				.6								.6	12.0
W	.6	.6										1.3	4.0
WNW													
NW													
NNW				.6								.6	13.0
VARBL												18.1	
CALM												100.0	4.8
	27.1	24.5	20.6	9.0	.6								

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

OCT

MONTH

03

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	1.3	1.9	1.3								6.5	7.2
NNE	5.8	7.1	3.2									16.1	4.7
NE	6.5	2.6	.6	.6								10.3	4.2
ENE	5.8	2.6	2.6	.6								11.6	4.7
E	1.9	3.2	6.5	.6	1.3							13.5	7.6
ESE	1.3	1.9	3.2									6.5	7.1
SE	1.3	2.6										3.9	4.2
SSE	1.3	1.3										2.6	3.0
S	3.2	1.3	.6									5.2	3.1
SSW			.6									.6	10.0
SW	.6		.6									1.3	5.5
WSW		.6										.6	5.0
W													
WNW													
NW													
NNW				.6								.6	8.0
VARBL													
CALM												20.6	
	29.7	24.5	20.6	3.2	1.3							100.0	4.3

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

06  
MONTH

ALL WEATHER  
CLASS

06  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	2.6	2.6	.6								7.7	5.8
NNE	3.9	5.8	3.9	.6								14.2	5.5
NE	7.1	4.5	3.2									14.8	4.4
ENE	6.5	4.5	1.3									12.3	4.0
E	3.9	3.2	3.9	2.6								13.5	6.7
ESE		1.3	1.9	.6								3.9	8.2
SE	1.3	2.6	1.9									5.8	5.6
SSE	.6	1.9	.6									3.2	4.4
S	.6	.6										1.3	3.0
SSW	.6	.6										1.3	3.0
SW	.6	.6	.6									1.9	5.0
WSW	.6											.6	3.0
W												.6	10.0
WNW			.6									.6	3.0
NW												.6	3.0
NNW	.6												
VARBL													
CALM												18.1	
	28.4	28.4	20.6	4.5								100.0	4.3

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

OCT

MONTH

ALL WEATHER

CLASS

09

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	3.9	3.2	1.3	.6							10.3	7.9
NNE		3.9	9.7									13.5	8.0
NE	1.3	9.0	7.7	1.9								20.0	7.0
ENE	1.3	3.2	5.8	.6								11.0	7.3
E	1.9	1.9	9.0	4.5								17.4	8.5
ESE		.6	1.3	1.3								3.2	11.0
SE		1.9	1.9									3.9	6.7
SSE	.6	.6										1.3	4.0
S	2.6	.6	1.3	.6								5.2	5.3
SSW		1.3	.6									1.9	6.0
SW		1.3	.6									1.9	6.0
WSW	.6	.6	1.3									2.6	5.5
W			.6									.6	7.0
WNW	.6											.6	1.0
NW													
NNW	1.3			.6								1.9	6.3
VARBL													
CALM												4.5	
	11.6	29.0	43.2	11.0	.6							100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

42215 STATION FUTENMA, OKINAWA 73-77 YEARS OCT MONTH 12 HOURS (L.S.T.)

ALL WEATHER CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.3	5.2	4.5								11.6	9.7
NNE	.6	1.3	5.2	1.3								8.4	8.3
NE		1.3	7.1	1.9								10.3	9.6
ENE	.6	3.2	10.3	4.5								18.7	8.8
E	.6	5.2	6.5	5.8								18.1	8.9
ESE		.6	3.2	2.6								6.5	10.3
SE	.6	.6	1.9	.6								3.9	7.3
SSE	.6	.6	.6									1.9	5.3
S	.6	.6	.6									1.9	5.3
SSW		.6	.6	.6								1.9	8.3
SW				.6								.6	15.0
WSW		1.3										1.3	4.5
W	1.3	1.9	.6									3.9	4.7
WNW		1.9										1.9	4.3
NW			1.9									1.9	9.3
NNW		1.9	2.6	.6								5.2	7.0
VARBL													
CALA												1.9	
	5.8	22.6	46.5	23.2								100.0	8.3

TOTAL NUMBER OF OBSERVATIONS 155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENNA, OKINAWA

STATION NAME

73-77

YEARS

OCT

MONTH

ALL WEATHER

CLASS

15

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N		.6	5.8	4.5	.6							11.6	10.6
NNE		2.6	8.4	1.3								12.3	8.5
NE		1.3	3.2	2.6								7.1	9.9
ENE		1.3	9.0	1.9	.6							12.9	8.9
E	.6	6.5	11.0	5.2	.6							23.9	8.6
ESE		2.6	3.9	1.3								7.7	8.5
SE		.6	.6									1.3	5.5
SSE	.6	1.3	1.3	.6								2.6	7.5
S		1.3										1.3	5.5
SSW		.6										.6	5.0
SW			.6		.6							1.3	14.5
WSW			1.3									1.3	9.0
W		1.3	1.9									3.2	7.4
WNW		1.9	1.3									3.2	6.4
NW		.6	.6									1.3	7.0
NNW	1.3	1.9	2.6	1.3								7.1	7.2
VARBL													
CALM												1.3	
	2.6	23.2	51.6	18.7	2.6							100.0	8.5

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

42215  
STATION

FUTENMA, OKINAWA

73-77

YEARS

OCT

MONTH

ALL WEATHER

CLASS

18

HOURS (U.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	4.5	4.5	1.9								11.6	7.4
NNE	3.2	9.0	5.2	2.6	.6							20.6	6.6
NE	1.3	2.6	3.2	1.3								8.4	6.9
ENE	.6	7.7	4.5	3.2								16.1	7.4
E	.6	7.7	7.7	2.6								18.7	7.6
ESE	.6	3.2	.6	.6								5.2	5.9
SE													
SSE		.6		.6								1.3	8.5
S	1.3	1.3										2.6	4.3
SSW	1.3		.6									1.9	4.0
SW	.6			1.3								1.9	10.0
WSW		.6										.6	4.0
W	1.3		1.3									2.6	5.3
WNW		.6		.6								1.3	8.0
NW		1.9										1.9	5.7
NNW	.6	1.9										2.6	4.5
VARBL													
CALM												2.6	
	12.3	41.9	27.7	14.8	.6							100.0	6.7

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

OCT

MONTH

ALL WEATHER

CLASS

21

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	.6	3.9									5.8	6.7
NNE	5.2	5.2	3.2	1.9								15.5	5.8
NE	7.1	7.1	3.9									18.1	4.6
ENE	3.9	5.8	.6	1.3								11.6	5.1
E	2.6	9.0	9.7	1.9								23.2	7.2
ESE	1.9	1.9										3.9	3.2
SE		.6	.6									1.3	5.5
SSE	.6	1.3										1.9	4.0
S		.6										.6	4.0
SSW													
SW				1.3								1.3	14.0
WSW													
W													
WNW	.6	.6										1.3	4.5
NW													
NNW		1.3		.6								1.9	8.0
VARBL													
CALM												13.5	
	23.2	34.2	21.9	7.1								100.0	5.1

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

OCT  
MONTH

ALL WEATHER  
CLASS

ALL  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	2.2	3.5	1.8	.2							8.9	8.0
NNE	2.8	4.7	5.3	1.0	.1							14.0	6.5
NE	3.7	4.1	3.8	1.1								12.7	6.0
ENE	3.1	4.0	4.8	1.8	.1							13.6	6.7
E	2.0	5.2	7.5	3.2	.2							18.2	7.8
ESE	.6	1.9	2.1	1.0								5.6	7.7
SE	.4	1.3	1.0	.1								2.8	5.9
SSE	.9	.8	.3	.2								2.2	4.7
S	1.0	1.0	.4	.1								2.5	4.5
SSW	.3	.4	.3	.2								1.2	6.1
SW	.4	.2	.3	.4	.1							1.5	8.4
WSW	.2	.4	.3	.1								1.0	6.1
W	.4	.5	.6									1.5	5.6
WNW	.2	.6	.2	.1								1.1	5.6
NW	.3	.3	.3									.6	7.4
NNW	.5	.9	.7	.5								2.6	6.9
VARBL													
CALM												10.1	
	17.6	28.5	31.6	11.5	.7							100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

1240

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

NOV

MONTH

ALL WEATHER

CLASS

00

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.0	4.7	5.3	6.0								18.0	8.4
NNE	6.7	7.3	6.0	2.0	.7							22.7	6.3
NE	6.7	6.0	2.7	.7								16.0	4.7
ENE	3.3	6.7	3.3	1.3	.7							15.3	6.5
E	.7	2.0	5.3	1.3	.7							10.0	8.7
ESE	1.3		1.3									2.7	5.5
SE		.7	.7									1.3	7.0
SSE	.7											.7	2.0
S	.7	.7										1.3	4.5
SSW													
SW													
WSW													
W													
WNW					.7							.7	18.0
NW													
NNW			.7	.7								1.3	11.5
VARBL													
CALM												10.0	
	22.0	28.0	25.3	12.0	2.7							100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

150

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

NOV  
MONTH

ALL WEATHER  
CLASS

03  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	5.3	8.7	3.3			.7					19.3	8.5
NNE	3.3	10.7	7.3	.7								22.0	6.0
NE	5.3	8.0	2.0	1.3								16.7	5.1
ENE	4.7	2.7	4.0	.7	.7							12.7	5.9
E	2.0	4.0	2.7	2.7								11.3	7.4
ESE	.7	.7	1.3									2.7	6.3
SE	.7											.7	1.0
SSE		.7										.7	6.0
S	1.3	.7										2.0	4.0
SSW	.7											.7	3.0
SW													
WSW													
W													
WNW													
NW			.7	.7								1.3	11.5
NNW				1.3								1.3	11.5
VARBL													
CALM												8.7	
	20.0	32.7	26.7	10.7	.7		.7					100.0	6.0

TOTAL NUMBER OF OBSERVATIONS

150



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

NOV  
MONTH

ALL WEATHER  
CLASS

06  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.7	4.7	4.7	2.0	.7							14.7	7.5
NNE	6.0	10.7	8.0	2.0								26.7	6.1
NE	6.0	5.3	3.3									14.7	5.0
ENE	6.0	3.3	4.0	1.3								14.7	5.5
E	5.3	4.0	4.0	.7	.7							14.7	5.7
ESE				.7	.7							1.3	16.0
SE	.7	1.3										2.0	4.3
SSE	.7											.7	2.0
S	.7	.7										1.3	4.0
SSW													
SW													
WSW													
W			.7									.7	6.0
WNW													
NW													
NNW			1.3	1.3								2.7	12.3
VARBL												6.0	
CALM													
	28.0	30.0	26.0	6.0	2.0							100.0	5.8

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

73-77

STATION NAME

YEARS

NDV  
MONTH

ALL WEATHER  
CLASS

09  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.0	6.0	8.7	5.3	.7							22.7	8.3
NNE	4.0	8.7	9.3	2.7	.7							25.3	7.0
NE	1.3	7.3	8.7	2.0								19.3	7.1
ENE	2.0	4.0	2.7	3.3								12.0	7.6
E	.7	1.3	3.3	2.7								8.0	8.9
ESE	.7		1.3	.7	.7							3.3	9.4
SE		.7	.7									1.3	8.0
SSE													
S		1.3	.7									2.0	6.3
SSW													
SW			.7									.7	4.0
WSW													
W													
WNW													
NW			.7									.7	7.0
NNW			1.3									1.3	9.5
VARBL												3.3	
CALM													
	10.7	30.0	37.3	16.7	2.0							100.0	7.4

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

NOV

MONTH

ALL WEATHER

CLASS

12

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	2.7	6.7	13.3	.7							24.0	10.9
NNE	.7	2.0	10.7	4.7								18.0	9.1
NE		1.3	4.7	2.7								8.7	9.2
ENE	.7	3.3	8.0	6.7								18.7	9.6
E		2.0	5.3	5.3	.7							13.3	10.5
ESE		.7	2.7									3.3	8.0
SE		1.3	.7	.7								2.7	7.8
SSE		.7	.7									1.3	6.0
S	.7											.7	3.0
SSW													
SW				.7								.7	11.0
WSW													
W		.7										.7	6.0
WNW	.7											.7	3.0
NW		.7										.7	6.0
NNW		1.3	2.7	1.3								5.3	9.5
VARBL													
CALM												1.3	
	3.3	16.7	42.0	35.3	1.3							100.0	9.5

TOTAL NUMBER OF OBSERVATIONS

150



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

NOV  
MONTH

ALL WEATHER  
CLASS

15  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.7	9.3	8.0	1.3	.7						20.7	11.2
NNE	.7	4.0	11.3	5.3								21.3	9.0
NE		2.7	6.7	3.3								12.7	9.0
ENE		1.3	4.0	8.0								13.3	10.9
E	.7	3.3	6.0	2.0								12.0	7.6
ESE		2.0	1.3		.7							4.0	7.8
SE			1.3									1.3	7.5
SSE				.7								.7	15.0
S			.7									.7	9.0
SSW			.7									.7	10.0
SW		.7										.7	6.0
WSW		1.3	.7									2.0	6.3
W													
WNW		1.3		.7								2.0	6.7
NW		.7	.7									1.3	6.0
NNW		1.3	.7	4.0								6.0	10.0
VARBL													
CALM												.7	
	2.0	19.3	43.3	32.0	2.0	.7						100.0	9.3

TOTAL NUMBER OF OBSERVATIONS

150

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

NOV

MONTH

ALL WEATHER

CLASS

18

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	4.7	10.0	5.3	.7							22.0	9.0
NNE	2.7	10.0	10.0	2.7								25.3	6.8
NE	3.3	6.7	4.0	1.3								15.3	6.0
ENE	1.3	4.0	5.3		.7							11.3	6.6
E	2.7	1.3	6.7	2.0								12.7	7.8
ESE	.7		2.0									2.7	6.8
SE		.7										.7	6.0
SSE	.7											.7	2.0
S			.7		.7							1.3	13.0
SSW	.7											.7	2.0
SW													
WSW													
W		.7										.7	5.0
WNW			.7									.7	8.0
NW	.7											.7	2.0
NNW			1.3	.7								2.0	10.7
VARBL													
CALM												3.3	
	14.0	28.0	40.7	12.0	2.0							100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

NOV  
MONTH

ALL WEATHER  
CLASS

21  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.0	8.0	4.7	4.0	.7							19.3	7.4
NNE	4.0	9.3	6.0	2.7	.7							22.7	6.6
NE	8.0	5.3	5.3	.7								19.3	4.9
ENE	3.3	4.0	3.3	2.7	1.3							14.7	7.8
E	3.3		6.0	2.0	.7							12.0	7.9
ESE	.7		.7									1.3	4.5
SE		1.3	.7									2.0	6.7
SSE	.7											.7	2.0
S	.7											.7	1.0
SSW					.7							.7	20.0
SW		.7										.7	4.0
WSW		.7										.7	5.0
W													
WNW													
NW				.7								.7	11.0
NNW			.7	1.3								2.0	11.7
VARBL													
CALM												2.7	
	22.7	29.3	27.3	14.0	4.0							100.0	6.7

TOTAL NUMBER OF OBSERVATIONS

150



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENNA, OKINAWA  
STATION NAME

73-77  
YEARS

NOV  
MONTH

ALL WEATHER  
CLASS

ALL  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.6	4.6	7.2	5.9	.6	.1	.1					20.1	9.0
NNE	3.5	7.8	8.6	2.8	.2							23.0	7.0
NE	3.8	5.3	4.7	1.5								15.3	6.1
ENE	2.7	3.7	4.3	3.0	.4							14.1	7.6
E	1.9	2.2	4.9	2.3	.3							11.7	8.0
ESE	.5	.4	1.3	.2	.2							2.7	7.8
SE	.2	.7	.5	.1								1.5	6.4
SSE	.3	.2	.1	.1								.7	5.6
S	.5	.4	.2		.1							1.2	5.8
SSW	.2		.1		.1							.3	8.8
SW		.2		.1								.2	7.0
WSW		.3	.1									.4	5.6
W		.2	.1									.2	6.3
WNW	.1	.2	.1	.1	.1							.5	8.2
NW	.1	.2	.2	.2								.7	7.6
NNW		.3	1.1	1.3								2.7	10.5
VARBL													
CALM												4.3	
	15.3	26.7	33.6	17.6	2.1	.1	.1					100.0	7.3

TOTAL NUMBER OF OBSERVATIONS

1200

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENKA, OKINAWA  
STATION NAME

73-77  
YEARS

DEC  
MONTH

ALL WEATHER  
CLASS

00  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	5.2	5.8	3.9								16.8	7.5
NNE	3.2	7.1	5.2									15.5	5.6
NE	5.6	5.2	1.3	.6								12.9	4.3
ENE	5.6	3.9	1.3		.6							11.6	4.7
E	3.9	1.3	3.2	2.6								11.0	6.8
ESE	.6	.6	1.3	.6								3.2	7.2
SE	.6	1.3	1.3									3.2	5.6
SSE		1.9										1.9	4.7
S	.6	1.3	1.3									3.2	5.8
SSW		1.3										1.3	4.0
SW													
WSW													
W													
WRW		1.3										1.3	6.0
NW		.6										.6	4.0
NNW			1.9	2.6	.6							5.2	12.1
VARBL													
CALM												12.3	
	22.6	31.0	22.6	10.3	1.3							100.0	5.4

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77

YEARS

DEC  
MONTH

ALL WEATHER  
CLASS

03  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	3.9	7.7	3.9								17.4	7.9
NNE	.6	12.3	3.2									16.1	5.6
NE	4.3	7.7	.6									12.9	3.7
ENE	3.9	4.5		1.9								10.3	5.3
E	1.9	3.2	3.2									8.4	5.8
ESE	.6		2.6									3.2	7.8
SE	1.3	.6	1.3									3.2	5.6
SSE	.6	1.3	.6									2.6	5.3
S	1.3	.6	.6									2.6	4.8
SSW		1.3										1.3	4.0
SW		.6	.6									1.3	6.0
WSW		.6										.6	4.0
W													
WNW			1.3									1.3	8.5
NW		.6		1.9	.6							3.2	11.6
NNW			.6	2.6	.6							3.9	12.3
VARBL													
CALM												11.6	
	16.8	37.4	22.6	10.3	1.3							100.0	5.6

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

DEC

MONTH

ALL WEATHER

CLASS

06

HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	3.9	8.4	3.2	.6							17.4	8.3
NNE	5.8	6.5	5.2									17.4	4.9
NE	3.9	5.2	1.9									11.0	4.4
ENE	5.2	3.9	.6									9.7	3.3
E	4.5	2.6	1.3	1.3								9.7	5.5
ESE			1.9	.6								2.6	10.0
SE	1.3	1.3	1.3									3.9	5.7
SSE	3.2		.6									3.9	3.0
S	1.9		.6									2.6	4.0
SSW	1.3											1.3	2.0
SW													
WSW		.6										.6	4.0
W	.6	.6										1.3	4.5
WNW			.6									.6	8.0
NW				.6								.6	14.0
NNW		.6	1.9	5.2								7.7	12.1
VARBL													
CALA												9.7	
	29.0	25.2	24.5	11.0	.6							100.0	5.5

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

73-77

DEC

STATION NAME

YEARS

NORTH

ALL WEATHER

09

CLASS

MOUSE (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.6	6.5	5.2	6.5								20.6	8.0
NNE	2.6	7.7	5.8	1.3								17.4	6.0
NE	1.9	9.0	4.5	.6								16.1	5.6
ENE	2.6	6.5		.6								9.7	4.9
E	.6	3.9	3.9	1.3								9.7	7.9
ESE			.6	.6								1.3	10.5
SE	.6	1.3	.6									2.6	4.5
SSE	.6	.6	1.3									2.6	6.8
S	.6	1.3	.6	.6								3.2	6.6
SSW		.6										.6	5.0
SW		.6										.6	6.0
WSW	.6											.6	2.0
W	.6	1.3										1.9	4.0
WNW													
NW			.6									.6	7.0
NNW		.6	1.9	3.2	.6							6.5	11.9
VARBL													
CALM												5.8	
	13.5	40.0	25.2	14.8	.6							100.0	6.5

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

DEC  
MONTH

ALL WEATHER  
CLASS

12  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	3.2	14.2	7.7	.6							27.7	9.2
NNE	1.3	5.2	9.0	2.6								18.1	7.5
NE	.6	2.6	4.5	1.3								9.0	7.7
ENE		2.6	3.2	1.9								7.7	8.4
E		2.6	4.5	3.9	.6							11.6	9.7
ESE			1.3									1.3	9.0
SE		.6	.6	1.3								2.6	9.3
SSE	.6		.6	.6								1.9	7.0
S		1.3	1.3	.6	.6							3.9	10.2
SSW		.6	.6									1.3	7.5
SW			.6	.6								.6	13.0
WSW			.6									.6	8.0
W	.6	.6										.6	6.0
WNW		.6	.6									1.3	4.5
NW		1.3	.6	.6								2.6	8.3
NNW		1.3	3.9	3.2								6.4	10.1
VARBL													
CALA												.6	
	5.2	21.9	45.8	24.5	1.9							100.0	8.7

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

73-77

YEARS

DEC

MONTH

15

HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	7.1	14.2	8.4								31.6	8.7
NNE	1.9	1.3	6.5	1.9								11.6	7.6
NE		.6	3.9	.6								5.2	8.5
ENE		1.9	5.8									7.7	7.7
E		2.6	4.5	4.5								11.6	9.4
ESE	1.3	.6	1.9	.6								4.5	6.7
SE		.6	1.3	.6								2.6	9.0
SSE		.6										.6	6.0
S		1.3	1.3	1.3								3.9	9.2
SSW		.6	1.3	.6								2.6	8.8
SW			1.9									1.9	9.0
WSW	.6											.6	3.0
W		.6										.6	6.0
WNW	.6	.6	.6									1.9	5.0
NW		1.3										1.3	5.0
NNW	1.9		4.5	5.2								11.6	9.7
VARBL												.0	
CALM													
	8.4	20.0	47.7	23.9								100.0	8.4

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANWET SMOS

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENHA, OKINAWA  
STATION NAME

73-77  
YEARS

DEC  
MONTH

18  
HOURS (L.S.T.)

ALL WEATHER  
CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.2	7.1	7.7	6.5	1.3	.6						26.5	8.6
NNE	2.6	7.1	8.4	.6								18.7	6.0
NE	3.2	5.8	4.5	.6								14.2	5.6
ENE	2.6	4.5	1.3	.6								9.0	5.4
E		3.9	3.9									7.7	6.8
ESE		1.3	1.9	.6								3.9	7.7
SE		1.3	1.3									1.3	8.0
SSE	.6	1.3	.6									2.6	4.8
S		.6										.6	5.0
SSW		1.3	.6									1.9	5.3
SW		.6	.6									1.3	7.0
WSW	.6		.6									1.3	5.5
W			.6									.6	7.0
WNW													
NW		.6		.6								1.3	8.0
NNW		1.3	3.9									5.2	7.3
VARBL													
CALM												3.9	
	12.9	35.5	36.1	9.7	1.3	.6						100.0	6.5

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENNA, OKINAWA  
STATION NAME

73-77  
YEARS

DEC  
MONTH

ALL WEATHER  
CLASS

21  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	5.2	7.1	6.5	.6							21.3	8.6
NNE	3.2	5.2	2.6	1.3								12.3	5.7
NE	7.1	9.7	1.3	.6								18.7	4.5
ENE	4.5	4.5	.6	1.3								11.0	4.8
E	2.6	1.3	3.9	1.3								9.0	6.6
ESE		.6	1.3									1.9	6.3
SE		1.3	1.3									2.6	6.3
SSE	1.9	1.3	.6									3.9	3.5
S	.6	1.3	.6									2.6	5.0
SSW			.6									.6	8.0
SW													
WSW		.6										.6	4.0
W		.6										.6	6.0
WNW		.6										.6	5.0
NW			.6	.6								1.3	11.0
NNW	.6		1.9	.6	.6							3.9	10.5
VARBL													
CALM												9.0	
	22.6	32.3	22.6	12.3	1.3							100.0	5.7

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENHA, OKINAWA  
STATION NAME

73-77  
YEARS

DEC  
MONTH

ALL WEATHER  
CLASS

ALL  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.1	5.2	8.8	5.8	.4	.1						22.4	8.4
NNE	2.7	6.5	5.7	1.0								15.9	6.1
NE	3.4	5.7	2.8	.6								12.5	5.2
ENE	3.1	4.0	1.6	.8	.1							9.6	5.4
E	1.7	2.7	3.5	1.9	.1							9.8	7.5
ESE	.3	.4	1.6	.4								2.7	7.8
SE	.5	.9	1.1	.2								2.7	6.5
SSE	1.0	.9	.6	.1								2.5	4.7
S	.6	1.0	.8	.3	.1							2.8	6.8
SSW	.2	.7	.4	.1								1.4	5.8
SW	.2	.2	.4	.1								.7	8.0
WSW	.2	.2	.2									.6	4.5
W	.2	.5	.1									.7	5.1
WNW	.2	.3	.4									.9	6.0
NW	.6	.6	.2	.6	.1							1.5	9.1
NNW	.3	.5	2.6	2.8	.3							6.5	10.6
VARBL													
CALM												6.6	
	16.4	30.4	30.9	14.6	1.0	.1						100.0	6.5

TOTAL NUMBER OF OBSERVATIONS

1240

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENNA, OKINAWA

STATION NAME

73-77

YEARS

ALL  
MONTH

ALL WEATHER  
CLASS

ALL  
HOURS (L.S.T.)

CONDITION

5702 SURFACE WINDS JAN 78

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	2.6	3.6	2.5	.3	.0	.0	.0				10.2	8.4
NNE	1.8	3.2	2.8	.6	.0	.0						8.5	6.2
NE	2.0	2.7	2.1	.6	.0	.0						7.4	5.8
ENE	1.9	2.6	2.3	1.1	.1	.0	.0	.0				8.1	6.7
E	1.7	3.7	5.2	2.7	.3	.0	.0	.0				13.6	8.0
ESE	.9	2.1	3.1	1.3	.1	.0	.0	.0				7.5	7.9
SE	1.0	1.8	1.9	.5	.1	.0	.0					5.4	6.8
SSE	1.1	1.4	1.3	.5	.0	.0	.0					4.3	6.4
S	1.0	1.8	2.4	1.3	.1	.0						6.8	7.9
SSW	.2	.8	1.5	1.8	.2		.0					4.5	10.0
SW	.2	.5	1.2	1.1	.1	.0	.0					3.2	9.7
WSW	.2	.5	.8	.5	.0							1.9	8.5
W	.3	.6	.7	.3	.1	.1	.0	.0				2.1	8.3
WNW	.2	.6	.5	.3	.1	.0		.0				1.8	7.8
NW	.3	.7	.8	.7	.1	.0		.0	.0			2.6	9.1
NNW	.3	.8	1.7	1.6	.2	.0	.0	.0		.0		4.7	9.9
VARBL													
CALA												7.5	
	14.3	26.3	32.1	17.4	1.9	.4	.1	.1	.0	.0		100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

14607

NAVAL WEATHER SERVICE  
DETACHMENT  
ASHEVILLE, NC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

42215  
STATION

FUTENMA, OKINAWA  
STATION NAME

73-77  
YEARS

ALL  
MONTH

INSTRUMENT  
CLASS

ALL  
HOURS (L.S.T.)

CIG 200 TO 1400 FT W/VSBY 1/2 MI OR MORE,

AND/OR VSBY 1/2 TO 2-1/2 MI W/CIG 200 FT OR MORE

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	2.0	2.9	2.5	.3	.2		.1				8.5	9.6
NNE	.8	1.4	2.1	1.0								5.3	7.4
NE	.6	.9	1.7	.5	.1	.1						4.0	8.1
ENE	.1	.8	2.3	1.6	.5	.1	.1					5.5	10.8
E	.1	2.0	5.7	5.1	.8	.1	.1	.1				14.1	10.7
ESE	.1	1.5	3.3	2.7	.3	.1	.1	.1				8.1	10.3
SE	.1	1.2	2.7	1.0	.3		.1					5.3	9.4
SSE	.1	.3	2.1	1.2	.1							3.8	10.0
S	.5	1.1	4.6	3.7	.8	.3						10.9	10.9
SSW	.1	.7	2.5	5.5	1.0							9.7	11.9
SW	.1	.1	2.3	2.9	.2							5.7	11.2
WSW	.3	.4	1.2	1.1	.3							3.3	10.0
W	.3	1.1	1.2	.6	.3	.4	.1	.1				4.2	11.1
WNW	.3	.4	.5	.7	.3	.1		.1				2.3	11.3
NW	.3	.6	.7	.8	.1	.1						2.7	9.4
NNW	.3	1.1	2.0	1.2	.1	.1	.1					4.9	9.5
VARBL													
CALM												1.9	
	4.5	15.6	37.9	32.2	5.5	1.6	.5	.3				100.0	10.1

TOTAL NUMBER OF OBSERVATIONS

1465



## PART D CEILING VERSUS VISIBILITY

This summary is a bivariate percentage frequency distribution by classes of ceiling from zero to equal to or greater than 20,000 feet and as a separate class "no ceiling", versus visibility in 16 classes from zero to equal to or greater than 10 miles. Data are derived from 3-hourly observations, and three sets of tables are presented as follows:

1. Annual - all years and all hours combined
2. By month - all years and all hours combined
3. By month - by standard 3-hour groups

Due to the cumulative nature of this presentation, it is possible to determine the percentage frequency of occurrence for any given limit of ceiling or visibility separately, or in combination of ceiling and visibility. The totals progress to the right and downward. Ceiling may be determined independently by referring to totals in the extreme right hand column. Also, visibility may be determined independently by reference to the horizontal row of totals at the bottom of the page. The percentage frequency for which the station was meeting or exceeding any given set of minima may be determined from the figure at the intersection of the appropriate ceiling column and visibility row. Several examples in the use of these tables are shown on pages 2 and 3 below.

U. S. Weather Bureau and Navy stations did not report ceilings within the range 10,000 feet and higher prior to January 1949. Summaries prepared from data for these stations using the earlier period and data subsequent to January 1949 will be modified to limit ceilings to 10,000 feet. Short periods of record prior to 1949 for these stations will be eliminated from the summary. For Air Force stations, the "no ceiling" category includes clear and scattered conditions, and ceilings above 20,000 feet for period through June 1948. Beginning in July 1948 for Air Force stations and January 1949 for USWB and U. S. Navy stations the "no ceiling" category consists of observations with less than 6/10 total sky cover and those cases where total sky cover is 6/10 or more, but not more than 1/2 of the sky cover is opaque.

# EXAMPLES FOR USE OF CEILING VERSUS VISIBILITY TABLES IN THIS TABULATION

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING												≥ 0
≥ 1800												
≥ 1500					91.0							92.6
≥ 1200												
≥ 1000												
≥ 900												
≥ 800												
≥ 700												
≥ 600												
≥ 500										97.4		98.1
≥ 400												
≥ 300												
≥ 200												
≥ 100												
0					95.4		96.9			98.3		100.0

EXAMPLE # 1 Read ceiling values independently of visibility under column at right headed ≥ 0.  
For instance, from the table: Ceiling ≥ 1500 feet = 92.6%.

Ceiling ≥ 500 feet = 98.1%.

EXAMPLE # 2 Read visibilities independently of ceilings on bottom line opposite ≥ 0. From the table:  
Visibility ≥ 3 miles = 95.4%.  
Visibility ≥ 2 miles = 96.9%.  
Visibility ≥ 1 mile = 98.3%.

EXAMPLE # 3 To obtain combinations of ceiling with visibility, read figure at intersection of the two categories; i.e.: Ceiling ≥ 1500 feet with visibility ≥ 3 miles = 91.0%.

## PART D

### ADDITIONAL EXAMPLES

#### EXAMPLE # 4

Values below minimums stated in the table may be obtained by subtracting the value given in the table from 100%. Thus, to obtain the percentage of observations with ceiling < 1500 feet and/or visibility < 3 miles, subtract the value read from the table at the intersection, which is 91.0, from 100.0. The answer 9.0 is the percentage of observations with ceiling < 1500 feet and/or visibility < 3 miles.

Likewise, the percentage of observations with ceiling < 500 feet and/or visibility < 1 mile is 2.6, obtained by subtracting 97.4 from 100.0.

#### EXAMPLE # 5

To find the percentage of observations falling within the two categories given in example above, subtract the value read from the table for the first set of limits from the value in the table for the second set of limits. The difference will be the percentage of observations meeting the lower set of limits, but not meeting the higher set of limits.

The value 91.0 read from the table at the intersection of  $\geq 1500$  feet with  $\geq 3$  miles, subtracted from 97.4 read from the table at the intersection of  $\geq 500$  feet with  $\geq 1$  mile is equal to 6.4%. Thus; 6.4 percent of the observations meet the criteria: "ceiling  $\geq 500$  feet with visibility  $\geq 1$  mile, but  $< 3$  miles; or ceiling  $\geq 500$  feet, but  $< 1500$  feet with visibility  $\geq 1$  mile."

Since these tabulations are prepared in several ways including by month, by 3-hour groups it is possible to determine diurnal variations of ceiling and visibility limits as well as probabilities of various ceiling-visibility combinations.



# PART D

## SKY COVER

This summary is prepared from 3-hourly observations and is a percentage frequency distribution of total sky cover by tenths, plus mean sky cover, and total number of observations. It is presented in two tables as follows:

1. By month and annual - all hours and all years combined.
2. By month - by standard 3-hour groups.

NOTE: # 1: Sky cover (total cloud amount) was not reported by U. S. Services until mid 1945. Data, when available, were punched for Air Force stations beginning in 1946, but were not available for Navy stations until 1948 or 1949. Weather Bureau stations recorded total cloud amount in remarks beginning sometime in 1945, but few stations have punched data prior to 1948. This summary will, of course, be limited to period of available data.

NOTE: # 2: Some sources of punched data used for this summary report cloud amounts in oktas. These have been converted to tenths prior to summarizing, and notation is made on the form to indicate that data were originally reported in oktas. The manner of conversion is given below:

<u>OKTAS</u>	<u>TENTHS</u>
0	0
1	1
2	3
3	4
4	5
5	6
6	8
7	9
8 (or obscured)	10

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JAN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

00  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	5.8	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
≥ 20000	5.8	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
≥ 18000	5.8	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
≥ 16000	5.8	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
≥ 14000	5.8	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
≥ 12000	5.8	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
≥ 10000	5.8	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 9000	5.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 8000	7.7	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 7000	7.7	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 6000	7.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 5000	7.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 4500	7.7	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 4000	7.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 3500	8.4	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 3000	8.4	82.6	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 2500	8.4	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 2000	8.4	92.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1800	8.4	92.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1500	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 1200	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 1000	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 900	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 500	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 0	8.4	95.5	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215

STATION NAME  
FUTEMA, OKINAWA

73-77

STATION NAME

YEARS

JAN

MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

03

HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	
NO CEILING	3.2	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 20000	3.2	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 18000	3.2	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 16000	3.2	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 14000	3.2	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 12000	3.2	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
≥ 10000	3.2	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
≥ 9000	3.2	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
≥ 8000	5.8	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 7000	5.8	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 6000	5.8	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 5000	5.8	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
≥ 4500	5.8	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 4000	5.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 3500	6.5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 3000	6.5	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 2500	6.5	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 2000	6.5	92.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1800	6.5	92.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1500	6.5	94.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1200	6.5	94.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1000	6.5	94.2	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	6.5	94.2	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 800	6.5	94.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	6.5	94.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	6.5	94.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 500	6.5	94.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	6.5	94.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	6.5	94.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	6.5	94.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	6.5	94.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 0	6.5	94.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JAN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	2.6	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 20000	2.6	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 18000	2.6	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 16000	2.6	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 14000	2.6	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 12000	2.6	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
≥ 10000	2.6	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 9000	2.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6
≥ 8000	3.9	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
≥ 7000	3.9	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
≥ 6000	3.9	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
≥ 5000	3.9	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 4500	3.9	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 4000	3.9	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 3500	4.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 3000	5.2	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 2500	5.8	91.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 2000	5.8	92.9	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1800	5.8	92.9	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1500	5.8	95.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 1200	5.8	95.5	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 1000	5.8	96.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 900	5.8	96.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 800	5.8	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700	5.8	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600	5.8	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500	5.8	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	5.8	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	5.8	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	5.8	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	5.8	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
0	5.8	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JAN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 20000	15.5	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 18000	15.5	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 16000	15.5	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 14000	15.5	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 12000	15.5	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 10000	17.4	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
≥ 9000	18.1	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6
≥ 8000	23.9	43.9	43.9	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 7000	24.5	47.1	47.1	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 6000	24.5	47.7	47.7	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
≥ 5000	26.5	54.2	54.8	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 4500	27.1	56.8	57.4	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 4000	29.7	64.5	65.2	65.8	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 3500	30.3	69.0	69.7	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 3000	30.3	76.8	77.4	78.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 2500	33.6	84.5	85.2	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 2000	34.2	89.7	90.3	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1800	34.2	89.7	90.3	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1500	35.5	92.9	93.6	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1200	35.5	93.6	94.2	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1000	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 800	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 700	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 600	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 500	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 400	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 300	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 200	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 100	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
0	35.5	94.8	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JAN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

12  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	14.8	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 20000	15.5	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 18000	15.5	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
≥ 16000	15.5	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
≥ 14000	15.5	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
≥ 12000	15.5	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 10000	17.4	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 9000	17.4	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 8000	22.6	44.5	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
≥ 7000	23.9	46.5	47.1	47.1	47.1	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 6000	24.5	47.1	47.7	47.7	47.7	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
≥ 5000	26.5	51.0	51.6	51.6	51.6	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 4500	28.4	54.8	55.5	55.5	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 4000	32.9	63.2	63.9	63.9	63.9	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 3500	36.1	70.3	71.0	71.0	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 3000	38.1	77.4	78.1	78.1	78.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 2500	38.7	84.5	85.8	86.5	87.1	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 2000	40.7	89.0	90.3	91.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1800	40.7	89.0	90.3	91.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1500	41.9	91.0	92.3	92.9	93.6	94.8	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1200	42.6	91.6	92.9	93.6	94.2	95.5	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1000	42.6	92.3	93.6	94.8	95.5	96.8	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 900	42.6	92.3	93.6	94.8	95.5	96.8	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	42.6	92.3	93.6	94.8	95.5	96.8	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	42.6	92.3	93.6	94.8	95.5	96.8	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	42.6	92.3	93.6	94.8	95.5	96.8	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 500	42.6	92.3	93.6	94.8	96.1	97.4	97.4	98.7	99.4	99.4	100.0	100.0	100.0	100.0
≥ 400	42.6	92.3	93.6	94.8	96.1	97.4	97.4	98.7	99.4	99.4	100.0	100.0	100.0	100.0
≥ 300	42.6	92.3	93.6	94.8	96.1	97.4	97.4	98.7	99.4	99.4	100.0	100.0	100.0	100.0
≥ 200	42.6	92.3	93.6	94.8	96.1	97.4	97.4	98.7	99.4	99.4	100.0	100.0	100.0	100.0
≥ 100	42.6	92.3	93.6	94.8	96.1	97.4	97.4	98.7	99.4	99.4	100.0	100.0	100.0	100.0
0	42.6	92.3	93.6	94.8	96.1	97.4	97.4	98.7	99.4	99.4	100.0	100.0	100.0	100.0

155

TOTAL NUMBER OF OBSERVATIONS

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JAN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

15  
HOURS (L S T)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	≥ 0
NO CEILING	14.8	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9
≥ 20000	16.1	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
≥ 18000	16.1	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
≥ 16000	16.1	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
≥ 14000	16.1	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
≥ 12000	16.1	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
≥ 10000	17.4	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
≥ 9000	18.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 8000	25.2	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 7000	27.1	45.2	45.2	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 6000	27.1	45.2	45.2	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
≥ 5000	27.7	48.4	48.4	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
≥ 4500	28.4	51.6	51.6	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 4000	32.3	60.7	60.7	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 3500	35.5	67.7	67.7	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 3000	38.7	76.1	76.1	77.4	77.4	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 2500	41.9	83.2	83.2	85.2	85.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 2000	43.9	87.1	87.1	89.0	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 1800	45.2	89.0	89.0	91.0	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 1500	45.2	91.6	92.3	94.2	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 1200	45.2	92.3	92.9	94.8	94.8	95.5	95.5	95.5	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1000	45.2	92.3	93.6	95.5	95.5	96.1	96.1	96.8	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	45.2	92.3	93.6	95.5	95.5	96.1	96.1	96.8	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 800	45.2	92.3	93.6	95.5	95.5	96.1	96.1	96.8	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 700	45.2	92.3	93.6	95.5	95.5	96.1	96.1	96.8	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 600	45.2	92.9	94.8	96.8	96.8	97.4	97.4	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	45.2	92.9	94.8	96.8	96.8	97.4	97.4	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	45.2	92.9	94.8	96.8	96.8	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	45.2	92.9	94.8	96.8	96.8	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	45.2	92.9	94.8	96.8	96.8	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	45.2	92.9	94.8	96.8	96.8	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 0	45.2	92.9	94.8	96.8	96.8	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

STATION NAME

YEARS

JAN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	14.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
≥ 20000	16.8	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 18000	16.8	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 16000	16.8	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 14000	16.8	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 12000	17.4	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
≥ 10000	18.1	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 9000	18.1	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 8000	20.0	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 7000	20.0	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 6000	20.0	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
≥ 5000	21.3	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 4500	21.3	51.0	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 4000	25.2	58.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 3500	27.1	63.9	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 3000	29.7	74.2	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 2500	31.6	82.6	85.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 2000	33.6	87.1	89.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 1800	34.2	87.7	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 1500	34.2	89.0	92.9	93.6	93.6	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1200	34.2	89.0	92.9	93.6	93.6	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1000	34.2	89.7	93.6	94.8	94.8	94.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 900	34.2	89.7	93.6	94.8	94.8	94.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 800	34.2	89.7	94.2	95.5	95.5	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 700	34.2	89.7	94.2	95.5	95.5	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 600	34.2	89.7	94.2	95.5	95.5	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 500	34.2	89.7	94.8	96.1	96.1	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	34.2	89.7	94.8	96.1	96.1	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	34.2	89.7	94.8	96.1	96.1	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	34.2	89.7	94.8	96.1	96.1	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	34.2	89.7	94.8	96.1	96.1	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 0	34.2	89.7	94.8	96.1	96.1	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANNMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JAN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

21  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	
NO CEILING	5.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 20000	5.2	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 18000	5.2	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 16000	5.2	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 14000	5.2	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 12000	5.2	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 10000	5.2	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 9000	5.2	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 8000	7.1	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 7000	7.7	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 6000	7.7	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 5000	8.4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 4500	8.4	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 4000	8.4	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 3500	9.7	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 3000	10.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 2500	10.3	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 2000	10.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1800	10.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1500	10.3	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1200	10.3	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1000	10.3	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 900	10.3	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 800	10.3	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 700	10.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 600	10.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 500	10.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 400	10.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 300	10.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 200	10.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 100	10.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
0	10.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4

TOTAL NUMBER OF OBSERVATIONS

155



## CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATIONFUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JAN  
MONTHPERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)ALL  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	
NO CEILING	9.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	
≥ 20000	10.1	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	
≥ 18000	10.1	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	
≥ 16000	10.1	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	
≥ 14000	10.1	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	
≥ 12000	10.2	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	
≥ 10000	10.9	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	
≥ 9000	11.1	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	
≥ 8000	14.5	49.0	49.1	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	
≥ 7000	15.1	51.3	51.4	51.5	51.5	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	
≥ 6000	15.2	51.8	51.9	52.1	52.1	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	
≥ 5000	16.0	56.2	56.4	56.6	56.6	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	
≥ 4500	16.4	59.1	59.4	59.7	59.7	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	
≥ 4000	18.2	65.9	66.2	66.5	66.5	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	
≥ 3500	19.8	71.6	71.9	72.2	72.3	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	
≥ 3000	20.9	79.8	80.3	80.6	80.7	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	
≥ 2500	22.1	86.9	87.7	88.2	88.4	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	
≥ 2000	22.9	90.3	91.2	91.8	91.9	92.1	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	
≥ 1800	23.2	90.7	91.6	92.2	92.3	92.5	92.5	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	
≥ 1500	23.5	93.2	95.0	95.7	95.9	96.1	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	
≥ 1200	23.6	93.5	95.4	96.1	96.3	96.5	96.7	96.8	96.8	96.9	96.9	96.9	96.9	96.9	96.9	
≥ 1000	23.6	94.0	96.0	96.9	97.1	97.3	97.6	97.8	97.8	97.9	97.9	97.9	98.0	98.0	98.0	
≥ 900	23.6	94.0	96.0	96.9	97.1	97.3	97.6	97.8	97.8	97.9	97.9	97.9	98.0	98.0	98.0	
≥ 800	23.6	94.0	96.1	97.1	97.3	97.5	97.9	98.2	98.2	98.3	98.3	98.3	98.4	98.4	98.4	
≥ 700	23.6	94.2	96.3	97.3	97.7	97.9	98.4	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	
≥ 600	23.6	94.3	96.5	97.5	97.8	98.1	98.6	99.0	99.0	99.1	99.1	99.1	99.2	99.2	99.2	
≥ 500	23.6	94.3	96.6	97.7	98.1	98.3	98.9	99.4	99.4	99.5	99.5	99.5	99.6	99.6	99.6	
≥ 400	23.6	94.3	96.6	97.7	98.1	98.4	99.0	99.4	99.4	99.5	99.5	99.5	99.8	99.8	99.8	
≥ 300	23.6	94.3	96.6	97.7	98.1	98.4	99.0	99.4	99.4	99.5	99.5	99.5	99.8	99.8	99.8	
≥ 200	23.6	94.3	96.6	97.7	98.1	98.4	99.0	99.4	99.4	99.5	99.5	99.5	99.8	99.8	99.8	
≥ 100	23.6	94.3	96.6	97.7	98.1	98.4	99.0	99.4	99.4	99.5	99.5	99.5	99.8	99.8	99.8	
≥ 0	23.6	94.3	96.6	97.7	98.1	98.4	99.0	99.4	99.4	99.5	99.5	99.5	99.8	99.8	99.8	

TOTAL NUMBER OF OBSERVATIONS

1240

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEHA, OKINAWA  
STATION NAME

73-77

YEARS

FEB  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

00  
HOURS (L S T)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 0	≥ 0	≥ 0
NO CEILING	1.4	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
≥ 20000	1.4	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
18000	1.4	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
16000	1.4	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
14000	1.4	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
12000	1.4	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
10000	1.4	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
9000	1.4	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
8000	1.4	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
7000	1.4	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1
6000	1.4	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8
5000	1.4	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
4500	1.4	56.0	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
4000	1.4	65.3	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
3500	1.4	70.2	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
3000	1.4	82.3	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
2500	1.4	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
2000	1.4	89.4	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
1800	1.4	89.4	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
1500	1.4	91.5	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
1200	1.4	95.0	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
1000	1.4	95.7	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
900	1.4	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
800	1.4	96.5	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
700	1.4	96.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
600	1.4	96.5	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
500	1.4	96.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400	1.4	96.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	1.4	96.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	1.4	96.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	1.4	96.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	1.4	96.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

FEB  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

0.3  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	7	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4
≥ 20000	7	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
≥ 18000	7	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
≥ 16000	7	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
≥ 14000	7	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
≥ 12000	7	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
≥ 10000	7	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0
≥ 9000	7	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 8000	7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
≥ 7000	7	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 6000	7	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
≥ 5000	7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
≥ 4500	7	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5
≥ 4000	7	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
≥ 3500	7	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
≥ 3000	7	80.9	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6
≥ 2500	7	84.4	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 2000	7	88.7	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 1800	7	88.7	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 1500	7	92.2	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 1200	7	92.9	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 1000	7	93.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 900	7	94.3	96.5	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 800	7	94.3	96.5	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 700	7	95.7	97.9	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 600	7	95.7	97.9	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 500	7	95.7	97.9	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 400	7	96.5	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	7	96.5	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	7	96.5	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	7	96.5	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 0	7	96.5	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

FEB  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	7	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
≥ 20000	7	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
≥ 18000	7	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
≥ 16000	7	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
≥ 14000	7	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
≥ 12000	7	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
≥ 10000	7	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 9000	7	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 8000	7	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
≥ 7000	7	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2
≥ 6000	7	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2
≥ 5000	7	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8
≥ 4500	7	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5
≥ 4000	7	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 3500	7	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
≥ 3000	7	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
≥ 2500	7	84.4	84.4	85.1	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 2000	7	87.2	87.2	87.9	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 1800	7	87.9	87.9	88.7	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
≥ 1500	7	91.5	91.5	92.2	92.9	92.9	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 1200	7	92.9	93.6	94.3	95.0	95.0	95.0	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 1000	7	93.6	94.3	95.0	95.7	95.7	95.7	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 900	7	93.6	94.3	95.0	95.7	95.7	95.7	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 800	7	94.3	95.0	95.7	96.5	96.5	96.5	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 700	7	95.0	95.7	96.5	97.2	97.2	97.2	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 600	7	95.7	96.5	97.2	97.9	97.9	97.9	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 500	7	96.5	97.2	97.9	98.6	98.6	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	7	96.5	97.2	97.9	98.6	98.6	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	7	96.5	97.2	97.9	98.6	98.6	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	7	96.5	97.2	97.9	98.6	98.6	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	7	96.5	97.2	97.9	98.6	98.6	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 0	7	96.5	97.2	97.9	98.6	98.6	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

141

# CEILING VERSUS VISIBILITY

STATION NAME: AIRPORT, ASHEVILLE, NC

73-77

YEARS

FEB

MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09

HOURS (L.S.T.)

VISIBILITY (STATUTE MILES)																
	≥ 10	≥ 8	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
1200	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
1100	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
1000	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
900	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
800	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
700	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
600	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
500	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
400	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
300	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
200	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
100	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
0	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
1800	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
1700	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
1600	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
1500	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
1400	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
1300	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
1200	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
1100	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
1000	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
900	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
800	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
700	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
600	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
500	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
400	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
300	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
200	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
100	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
0	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

FEB  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

12  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	14.2	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 20000	14.9	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
≥ 18000	14.9	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
≥ 16000	14.9	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
≥ 14000	15.6	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
≥ 12000	15.6	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
≥ 10000	16.3	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
≥ 9000	16.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 8000	17.7	38.3	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
≥ 7000	19.2	43.3	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 6000	19.2	43.3	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 5000	19.9	44.7	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
≥ 4500	22.0	46.8	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
≥ 4000	25.5	59.6	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
≥ 3500	27.7	63.8	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 3000	29.8	73.8	74.5	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
≥ 2500	32.6	80.9	81.6	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3
≥ 2000	34.8	86.5	87.2	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 1800	34.8	87.2	87.9	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
≥ 1500	34.8	91.5	92.9	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 1200	34.8	93.6	95.0	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 1000	34.8	95.0	96.5	97.9	97.9	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 900	34.8	95.0	96.5	98.6	98.6	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 800	34.8	95.7	97.2	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	34.8	95.7	97.2	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	34.8	95.7	97.2	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	34.8	95.7	97.2	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	34.8	95.7	97.2	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	34.8	95.7	97.2	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	34.8	95.7	97.2	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	34.8	95.7	97.2	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	34.8	95.7	97.2	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

141



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

FEB  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

15  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	
NO CEILING	9.2	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
≥ 20000	10.6	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 18000	10.6	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 16000	10.6	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 14000	10.6	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 12000	11.4	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
≥ 10000	12.1	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 9000	12.8	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
≥ 8000	14.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
≥ 7000	17.0	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4
≥ 6000	17.0	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4
≥ 5000	16.4	42.6	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
≥ 4500	19.9	45.4	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
≥ 4000	21.3	53.9	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
≥ 3500	24.1	60.3	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
≥ 3000	29.1	74.5	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
≥ 2500	31.2	80.9	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6
≥ 2000	33.3	86.7	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
≥ 1800	33.3	88.7	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
≥ 1500	33.3	92.9	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 1200	33.3	93.6	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 1000	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 900	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 800	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 700	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 600	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 500	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 400	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 300	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 200	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 100	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 0	33.3	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7

TOTAL NUMBER OF OBSERVATIONS

141

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

FEB  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (L S T)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	10.6	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
≥ 20000	11.4	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 18000	11.4	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 16000	11.4	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 14000	11.4	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 12000	11.4	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 10000	12.1	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
≥ 9000	12.1	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
≥ 8000	13.5	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 7000	14.9	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
≥ 6000	14.9	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
≥ 5000	14.9	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
≥ 4500	16.3	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
≥ 4000	17.7	53.9	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
≥ 3500	19.2	58.9	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 3000	22.0	74.5	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
≥ 2500	24.8	82.3	83.7	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
≥ 2000	27.0	87.9	89.4	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 1800	27.0	87.9	89.4	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 1500	27.0	91.5	93.6	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 1200	27.0	92.2	94.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 1000	27.0	92.9	95.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 900	27.0	92.9	95.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 800	27.0	92.9	95.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 700	27.0	94.3	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 600	27.0	94.3	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 500	27.0	94.3	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	27.0	94.3	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	27.0	94.3	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	27.0	94.3	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	27.0	94.3	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 0	27.0	94.3	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

FEB  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

21  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	2.1	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
≥ 20000	2.1	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
≥ 18000	2.1	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
≥ 16000	2.1	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
≥ 14000	2.1	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
≥ 12000	2.1	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
≥ 10000	2.1	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 9000	2.1	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
≥ 8000	2.1	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 7000	2.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
≥ 6000	2.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
≥ 5000	2.1	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2
≥ 4500	2.1	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9
≥ 4000	2.1	54.6	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 3500	2.8	58.9	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 3000	2.8	74.5	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
≥ 2500	2.8	82.3	84.4	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
≥ 2000	2.8	87.9	90.1	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 1800	2.8	87.9	90.1	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 1500	2.8	89.4	92.2	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1200	2.8	90.1	93.6	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 1000	2.8	92.9	96.5	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 900	2.8	92.9	96.5	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 800	2.8	92.9	96.5	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 700	2.8	93.6	97.2	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 600	2.8	93.6	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 500	2.8	93.6	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	2.8	93.6	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	2.8	93.6	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	2.8	93.6	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	2.8	93.6	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 0	2.8	93.6	97.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

141

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
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YEARS

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## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (L S T)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	6.5	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8	26.8
≥ 20000	6.9	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4
≥ 18000	6.9	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4
≥ 16000	6.9	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4
≥ 14000	7.0	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
≥ 12000	7.1	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
≥ 10000	7.5	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9
≥ 9000	7.6	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
≥ 8000	8.6	40.7	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
≥ 7000	9.2	44.5	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
≥ 6000	9.2	45.0	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1
≥ 5000	9.6	48.0	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1
≥ 4500	10.2	49.7	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9
≥ 4000	11.2	59.8	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
≥ 3500	12.4	65.4	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
≥ 3000	14.1	77.7	78.3	78.5	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6
≥ 2500	15.1	82.6	83.7	84.3	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 2000	16.1	87.8	88.8	89.5	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 1800	16.1	87.9	89.0	89.7	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
≥ 1500	16.1	91.1	92.6	93.4	93.7	93.7	93.8	93.8	93.8	93.8	93.8	93.8
≥ 1200	16.1	92.6	94.4	95.2	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7
≥ 1000	16.1	93.6	95.6	96.5	96.9	97.0	97.2	97.3	97.3	97.3	97.3	97.3
≥ 900	16.1	93.9	95.8	96.9	97.5	97.6	97.8	97.9	97.9	97.9	97.9	97.9
≥ 800	16.1	94.2	96.2	97.3	97.9	98.0	98.2	98.3	98.3	98.3	98.3	98.3
≥ 700	16.1	94.7	96.8	98.0	98.6	98.7	98.9	99.0	99.0	99.0	99.0	99.0
≥ 600	16.1	94.8	97.0	98.2	98.9	99.0	99.3	99.4	99.4	99.4	99.4	99.4
≥ 500	16.1	94.9	97.2	98.4	99.1	99.2	99.5	99.6	99.6	99.6	99.6	99.6
≥ 400	16.1	95.0	97.3	98.6	99.3	99.4	99.7	99.7	99.7	99.7	99.7	99.7
≥ 300	16.1	95.0	97.3	98.6	99.3	99.4	99.7	99.7	99.7	99.7	99.7	99.7
≥ 200	16.1	95.0	97.3	98.6	99.3	99.4	99.7	99.7	99.7	99.7	99.7	99.7
≥ 100	16.1	95.0	97.3	98.6	99.3	99.4	99.7	99.7	99.7	99.7	99.7	99.7
≥ 0	16.1	95.0	97.3	98.6	99.3	99.4	99.7	99.7	99.7	99.7	99.7	99.7

TOTAL NUMBER OF OBSERVATIONS 1128

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

00  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	1.3	35.5	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 20000	1.3	35.5	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 18000	1.3	35.5	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 16000	1.3	35.5	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 14000	1.3	35.5	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 12000	1.3	35.5	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 10000	1.9	41.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 9000	1.9	41.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 8000	1.9	49.0	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
≥ 7000	2.6	51.6	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 6000	2.6	53.6	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
≥ 5000	2.6	56.1	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 4500	2.6	59.4	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 4000	2.6	61.9	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 3500	2.6	65.8	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 3000	2.6	74.2	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 2500	2.6	80.0	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 2000	2.6	84.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 1800	2.6	85.2	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 1500	2.6	90.3	92.9	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1200	2.6	91.6	94.2	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1000	2.6	92.3	94.8	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 900	2.6	92.9	95.5	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 800	2.6	93.6	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	2.6	93.6	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	2.6	94.2	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	2.6	94.2	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	2.6	94.2	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	2.6	94.2	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	2.6	94.2	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	2.6	94.2	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 0	2.6	94.2	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

03  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 20000	.7	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 18000	.7	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 16000	.7	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 14000	.7	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 12000	.7	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 10000	.7	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 9000	.7	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 8000	.7	49.7	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
≥ 7000	.7	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 6000	.7	52.3	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 5000	.7	54.8	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 4500	.7	57.4	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 4000	.7	59.4	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 3500	.7	63.9	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 3000	.7	70.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 2500	.7	75.5	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 2000	.7	80.0	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 1800	.7	80.0	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 1500	.7	86.5	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 1200	.7	87.1	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 1000	.7	89.0	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 900	.7	89.0	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 800	.7	89.0	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 700	.7	89.0	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 600	.7	91.0	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 500	.7	91.0	96.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	.7	91.0	96.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	.7	91.0	96.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	.7	91.6	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	.7	91.6	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
0	.7	91.6	96.8	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	.7	32.3	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6
≥ 20000	.7	32.9	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 18000	.7	32.9	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 16000	.7	32.9	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 14000	.7	32.9	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 12000	.7	32.9	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 10000	.7	35.5	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 9000	.7	37.4	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 8000	.7	45.8	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1
≥ 7000	.7	48.4	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
≥ 6000	.7	48.4	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
≥ 5000	.7	49.7	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
≥ 4500	.7	51.6	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 4000	.7	58.1	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 3500	.7	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 3000	.7	71.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 2500	.7	80.7	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 2000	.7	85.2	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 1800	.7	85.8	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 1500	.7	91.0	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 1200	.7	91.0	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1000	.7	92.9	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	.7	93.6	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 800	.7	93.6	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 700	.7	93.6	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 600	.7	93.6	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	.7	93.6	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	.7	93.6	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	.7	93.6	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	.7	93.6	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	.7	93.6	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	.7	93.6	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	14.8	30.3	31.6	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 20000	14.8	31.0	32.3	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 18000	14.8	31.0	32.3	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 16000	14.8	31.0	32.3	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 14000	14.8	31.0	32.3	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 12000	15.5	32.3	33.6	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 10000	15.5	36.1	38.1	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 9000	15.5	36.8	38.7	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
≥ 8000	17.4	43.2	45.8	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
≥ 7000	18.7	47.7	50.3	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
≥ 6000	18.7	48.4	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 5000	19.4	52.9	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 4500	21.3	56.1	58.7	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 4000	23.2	61.3	63.9	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 3500	23.2	63.9	66.5	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 3000	24.5	71.6	75.5	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 2500	25.2	78.1	81.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 2000	25.2	82.6	86.5	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 1800	25.2	82.6	86.5	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 1500	25.2	85.8	90.3	92.9	92.9	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 1200	25.2	85.8	90.3	92.9	92.9	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1000	25.2	87.1	91.6	94.2	94.2	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 900	25.2	87.1	91.6	94.2	94.2	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 800	25.2	87.7	92.3	96.1	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	25.2	87.7	92.9	97.4	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 600	25.2	87.7	92.9	97.4	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	25.2	87.7	92.9	97.4	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	25.2	87.7	92.9	97.4	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	25.2	87.7	92.9	97.4	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	25.2	87.7	92.9	97.4	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	25.2	87.7	92.9	97.4	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 0	25.2	87.7	92.9	97.4	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAR  
MONTH

12  
HOURS (L.S.T.)

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	15.5	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 20000	16.1	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
≥ 18000	16.1	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
≥ 16000	16.1	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
≥ 14000	16.1	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
≥ 12000	16.1	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
≥ 10000	18.1	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 9000	18.1	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 8000	18.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 7000	19.4	41.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 6000	19.4	41.3	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 5000	21.9	45.8	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
≥ 4500	22.6	47.7	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
≥ 4000	24.5	54.8	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 3500	25.2	56.1	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
≥ 3000	27.7	65.8	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 2500	29.0	74.2	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 2000	30.3	79.4	81.9	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
≥ 1800	30.3	80.0	82.6	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 1500	30.3	89.0	92.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 1200	30.3	90.3	93.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 1000	30.3	91.6	94.8	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 900	30.3	91.6	94.8	96.1	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 800	30.3	91.6	94.8	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	30.3	91.6	94.8	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	30.3	91.6	94.8	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 500	30.3	91.6	94.8	96.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	30.3	92.3	95.5	96.8	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	30.3	92.3	95.5	96.8	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	30.3	92.3	95.5	96.8	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	30.3	92.3	95.5	96.8	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	30.3	92.3	95.5	96.8	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155



# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

15  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	13.6	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
≥ 20000	15.5	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 18000	15.5	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 16000	15.5	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 14000	15.5	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 12000	15.5	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 10000	16.1	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 9000	16.8	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 8000	18.1	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 7000	19.4	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 6000	19.4	41.9	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 5000	19.4	45.2	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 4500	19.4	45.2	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 4000	19.4	49.7	50.3	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
≥ 3500	21.3	53.6	54.2	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
≥ 3000	24.5	63.9	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 2500	27.7	72.9	74.2	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 2000	29.0	78.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 1800	29.0	78.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 1500	29.7	83.9	85.8	87.1	87.7	87.7	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 1200	29.7	83.9	86.5	87.7	89.0	89.0	89.7	90.3	90.3	91.0	91.0	91.0	91.0	91.0	91.0
≥ 1000	30.3	86.5	91.0	93.6	95.5	95.5	96.1	96.8	96.8	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	30.3	86.5	91.0	93.6	95.5	95.5	96.1	96.8	96.8	97.4	97.4	97.4	97.4	97.4	97.4
≥ 800	30.3	86.5	91.0	94.2	96.1	96.1	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	30.3	86.5	91.0	94.2	96.1	96.1	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	30.3	86.5	91.0	94.8	96.8	96.8	97.4	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	30.3	87.1	91.6	95.5	98.1	98.1	98.7	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	30.3	87.1	91.6	95.5	98.1	98.1	98.7	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	30.3	87.1	91.6	95.5	98.1	98.1	98.7	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	30.3	87.1	91.6	95.5	98.1	98.1	98.7	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	30.3	87.1	91.6	95.5	98.1	98.1	98.7	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	30.3	87.1	91.6	95.5	98.1	98.1	98.7	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAR  
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

18  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	12.9	30.3	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
≥ 20000	12.9	31.6	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 18000	12.9	31.6	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 16000	12.9	31.6	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 14000	13.6	32.9	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6
≥ 12000	14.2	34.2	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 10000	14.8	37.4	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
≥ 9000	14.8	37.4	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
≥ 8000	17.4	46.5	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 7000	18.1	50.3	51.6	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 6000	18.1	50.3	51.6	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 5000	20.0	52.3	53.6	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 4500	20.0	52.3	54.2	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 4000	20.7	58.1	60.0	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 3500	20.7	60.7	62.6	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 3000	21.3	67.1	69.7	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 2500	23.2	74.8	77.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 2000	23.2	78.1	81.9	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 1800	23.2	78.1	81.9	85.2	85.8	85.8	87.1	87.1	87.1	87.1	87.1	87.1
≥ 1500	23.9	82.6	86.5	89.7	90.3	90.3	91.6	92.3	92.3	92.3	92.3	92.3
≥ 1200	23.9	84.5	88.4	92.3	92.9	92.9	94.2	94.8	94.8	94.8	94.8	94.8
≥ 1000	23.9	85.2	89.0	92.9	93.6	93.6	94.8	95.5	95.5	95.5	95.5	95.5
≥ 900	23.9	85.2	89.0	92.9	93.6	93.6	95.5	96.1	96.1	96.1	96.1	96.1
≥ 800	23.9	85.2	89.0	92.9	94.2	94.2	96.1	96.8	96.8	96.8	96.8	96.8
≥ 700	23.9	85.2	89.0	93.6	94.8	94.8	96.1	97.4	97.4	97.4	97.4	97.4
≥ 600	23.9	85.8	90.3	94.8	96.1	96.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 500	23.9	85.8	90.3	94.8	96.1	96.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 400	23.9	85.8	90.3	94.8	96.1	96.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 300	23.9	85.8	90.3	94.8	96.1	96.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 200	23.9	85.8	90.3	94.8	96.1	96.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 100	23.9	85.8	90.3	94.8	96.1	96.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 0	23.9	85.8	90.3	94.8	96.1	96.1	98.1	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAR  
MONTH

21  
DAYS (U.S.T.)

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾
NO CEILING	2.6	36.1	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 20000	2.6	36.1	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 18000	2.6	36.1	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 16000	2.6	36.1	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 14000	3.2	36.8	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 12000	3.2	36.8	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 10000	3.2	38.1	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 9000	3.2	38.1	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
8000	3.2	46.5	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1
7000	3.9	49.0	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
6000	3.9	51.0	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
5000	3.9	54.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
4500	3.9	56.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
4000	3.9	60.0	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
3500	3.9	61.3	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
3000	3.9	70.3	72.9	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
2500	3.9	77.4	80.7	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
2000	3.9	80.0	83.9	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
1800	3.9	80.0	83.9	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
1500	3.9	84.5	88.4	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
1200	3.9	86.5	91.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
1000	3.9	88.4	93.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
900	3.9	88.4	93.6	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
800	3.9	89.0	94.2	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
700	3.9	89.7	94.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
600	3.9	89.7	94.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
500	3.9	91.0	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
400	3.9	91.0	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
300	3.9	91.0	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
200	3.9	91.0	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
100	3.9	91.0	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
0	3.9	91.0	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



**UNCLASSIFIED**

NAVAL WEATHER SERVICE DETACHMENT ASHEVILLE NC F/G 4/2  
SUMMARY OF METEOROLOGICAL OBSERVATIONS, SURFACE (SMOS), FUTENMA--ETC(U)  
JUL 78

**F/G 4/2**

NL

3 OF 4

AD  
AO60538



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	7.7	51.8	32.3	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
≥ 20000	8.1	32.7	33.2	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 18000	8.1	32.7	33.2	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 16000	8.1	32.7	33.2	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 14000	8.2	33.0	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6
≥ 12000	8.4	33.5	34.0	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1
≥ 10000	8.9	37.3	37.9	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
≥ 9000	9.0	37.7	38.3	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4
≥ 8000	9.8	44.8	45.7	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 7000	10.4	47.6	48.8	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 6000	10.4	48.4	49.6	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
≥ 5000	11.1	51.4	52.6	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 4500	11.4	53.2	54.6	54.9	54.9	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
≥ 4000	11.9	57.9	59.4	59.8	59.8	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9
≥ 3500	12.3	61.2	62.7	63.2	63.2	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
≥ 3000	13.2	69.4	71.5	72.1	72.1	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
≥ 2500	14.1	76.7	79.1	80.0	80.0	80.1	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2
≥ 2000	14.4	81.1	84.1	85.2	85.2	85.2	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4
≥ 1800	14.4	81.3	84.4	85.5	85.6	85.7	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 1500	14.6	86.7	90.2	91.5	91.8	91.9	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1200	14.6	87.6	91.2	92.7	93.1	93.2	93.6	93.7	93.7	93.8	93.8	93.8	93.8	93.8
≥ 1000	14.7	89.1	93.2	94.8	95.3	95.5	95.8	96.0	96.0	96.1	96.1	96.1	96.1	96.1
≥ 900	14.7	89.3	93.4	95.2	95.7	95.9	96.3	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 800	14.7	89.5	93.7	95.8	96.4	96.7	97.2	97.3	97.3	97.4	97.4	97.4	97.4	97.4
≥ 700	14.7	89.6	93.9	96.1	96.6	96.9	97.4	97.6	97.6	97.7	97.7	97.7	97.7	97.7
≥ 600	14.7	90.0	94.4	96.8	97.3	97.7	98.2	98.3	98.3	98.6	98.6	98.6	98.6	98.6
≥ 500	14.7	90.2	94.6	97.2	98.0	98.3	98.9	99.0	99.0	99.3	99.4	99.4	99.4	99.4
≥ 400	14.7	90.3	94.7	97.3	98.1	98.4	99.0	99.1	99.1	99.5	99.7	99.8	99.8	99.8
≥ 300	14.7	90.3	94.7	97.3	98.1	98.4	99.0	99.1	99.1	99.5	99.7	99.8	99.8	99.8
≥ 200	14.7	90.4	94.8	97.3	98.2	98.5	99.0	99.2	99.2	99.6	99.8	99.9	99.9	99.9
≥ 100	14.7	90.4	94.8	97.3	98.2	98.5	99.0	99.2	99.2	99.6	99.8	99.9	99.9	99.9
≥ 0	14.7	90.4	94.8	97.3	98.2	98.5	99.0	99.2	99.2	99.6	99.8	99.9	99.9	99.9

1240

TOTAL NUMBER OF OBSERVATIONS

DIRNAVOCANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

APR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

00  
HOURS (L S T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														≥ 10
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	2.7	34.0	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
≥ 20000	3.3	35.3	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 18000	3.3	35.3	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 16000	3.3	35.3	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 14000	3.3	35.3	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 12000	3.3	38.0	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 10000	3.3	42.7	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
≥ 9000	3.3	43.3	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 8000	3.3	54.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 7000	3.3	56.0	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
≥ 6000	3.3	56.7	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
≥ 5000	3.3	58.0	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 4500	3.3	58.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 4000	4.0	64.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
≥ 3500	4.0	65.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 3000	4.7	69.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 2500	4.7	72.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 2000	5.3	76.7	78.7	78.7	78.7	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 1800	5.3	77.3	79.3	79.3	79.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1500	5.3	84.7	86.7	86.7	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 1200	5.3	87.3	89.3	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 1000	5.3	88.0	90.7	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 900	5.3	89.3	92.0	92.7	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 800	5.3	90.0	92.7	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 700	5.3	90.0	93.3	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 600	5.3	90.0	93.3	94.0	94.7	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 500	5.3	92.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 400	5.3	92.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 300	5.3	93.3	97.3	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	5.3	93.3	97.3	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	5.3	93.3	97.3	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 0	5.3	93.3	97.3	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS 150



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

APR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

03  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	3.3	37.3	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
≥ 20000	3.3	38.7	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
≥ 18000	3.3	38.7	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
≥ 16000	3.3	38.7	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
≥ 14000	3.3	38.7	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
≥ 12000	3.3	39.3	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
≥ 10000	4.0	46.0	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
≥ 9000	4.0	46.0	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
≥ 8000	4.0	52.7	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 7000	4.0	54.7	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
≥ 6000	4.0	54.7	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
≥ 5000	4.0	57.3	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 4500	4.0	60.0	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 4000	4.0	61.3	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 3500	4.0	63.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
≥ 3000	4.0	66.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 2500	4.0	70.7	73.3	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 2000	4.7	74.7	77.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 1800	4.7	74.7	77.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 1500	4.7	79.3	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 1200	4.7	81.3	84.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
≥ 1000	4.7	86.0	90.0	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
≥ 900	4.7	86.7	92.0	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 800	4.7	88.7	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 700	4.7	90.0	96.0	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 600	4.7	90.0	96.0	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 500	4.7	90.0	96.0	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 400	4.7	90.0	96.7	97.3	98.0	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	4.7	90.0	96.7	97.3	98.0	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	4.7	90.0	97.3	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	4.7	90.0	97.3	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	4.7	90.0	97.3	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

APR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														TOTAL NUMBER OF OBSERVATIONS
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	3.3	27.3	29.3	30.0	30.0	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7
≥ 20000	4.0	32.0	34.0	35.3	35.3	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 18000	4.0	32.0	34.0	35.3	35.3	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 16000	4.0	32.0	34.0	35.3	35.3	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 14000	4.0	33.3	35.3	36.7	36.7	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
≥ 12000	4.7	36.7	38.7	40.0	40.0	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
≥ 10000	4.7	43.3	45.3	46.7	46.7	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
≥ 9000	4.7	43.3	46.0	47.3	47.3	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
≥ 8000	4.7	47.3	50.0	51.3	51.3	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
≥ 7000	4.7	48.7	51.3	52.7	52.7	53.3	53.3	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 6000	4.7	49.3	52.0	53.3	53.3	54.0	54.0	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 5000	4.7	51.3	54.0	55.3	55.3	56.0	56.0	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
≥ 4500	4.7	52.0	54.7	56.0	56.0	56.7	56.7	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
≥ 4000	4.7	54.0	56.7	58.0	58.0	58.7	58.7	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 3500	5.3	55.3	58.0	59.3	59.3	60.0	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 3000	5.3	60.7	64.0	65.3	65.3	66.0	66.0	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
≥ 2500	5.3	64.0	68.0	69.3	69.3	70.0	70.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
≥ 2000	5.3	69.3	73.3	74.7	74.7	75.3	75.3	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 1800	5.3	69.3	73.3	74.7	74.7	75.3	75.3	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 1500	5.3	74.0	78.7	80.0	80.0	80.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 1200	5.3	74.7	80.0	81.3	81.3	82.0	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
≥ 1000	5.3	80.0	87.3	88.7	88.7	89.3	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 900	5.3	81.3	89.3	90.7	90.7	91.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 800	5.3	81.3	89.3	91.3	91.3	92.0	92.0	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 700	5.3	82.0	90.0	92.0	92.0	93.3	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 600	5.3	82.0	90.0	92.7	94.0	94.7	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 500	5.3	83.3	92.7	95.3	96.7	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	5.3	84.0	93.3	96.0	97.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	5.3	84.0	93.3	96.0	97.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	5.3	84.0	93.3	96.0	97.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	5.3	84.0	93.3	96.0	97.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 0	5.3	84.0	93.3	96.0	97.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS 150



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

APR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	9.3	24.7	24.7	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3
≥ 20000	10.7	28.0	28.0	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
≥ 18000	10.7	28.0	28.0	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
≥ 16000	10.7	28.0	28.0	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
≥ 14000	10.7	28.7	28.7	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
≥ 12000	12.7	32.7	32.7	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 10000	13.3	38.7	38.7	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
≥ 9000	13.3	38.7	38.7	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
≥ 8000	14.7	42.7	42.7	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 7000	14.7	43.3	43.3	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
≥ 6000	14.7	44.0	44.0	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 5000	14.7	45.3	45.3	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
≥ 4500	16.0	47.3	47.3	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7
≥ 4000	16.7	51.3	51.3	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 3500	16.7	53.3	53.3	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 3000	16.7	56.7	56.7	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
≥ 2500	18.0	62.7	63.3	64.7	64.7	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
≥ 2000	18.7	68.7	69.3	70.7	70.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 1800	18.7	68.7	69.3	70.7	70.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 1500	19.3	74.0	74.7	76.7	76.7	77.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 1200	22.0	78.0	80.7	80.7	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 1000	24.0	86.0	87.3	90.7	90.7	91.3	92.0	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 900	24.0	86.0	87.3	91.3	92.0	92.7	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 800	24.0	86.7	88.0	92.0	92.7	93.3	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 700	24.0	86.7	88.7	93.3	94.7	95.3	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 600	24.0	86.7	88.7	93.3	94.7	95.3	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 500	24.0	86.7	88.7	94.0	95.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 400	24.0	86.7	88.7	94.0	95.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 300	24.0	86.7	88.7	94.0	96.0	96.7	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0
≥ 200	24.0	86.7	88.7	94.0	96.0	96.7	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0
≥ 100	24.0	86.7	88.7	94.0	96.0	96.7	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0
≥ 0	24.0	86.7	88.7	94.0	96.0	96.7	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

APR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

12  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	8.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
≥ 20000	12.0	30.7	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3
≥ 18000	12.0	30.7	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3
≥ 16000	12.0	30.7	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3
≥ 14000	12.0	31.3	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0
≥ 12000	14.7	35.3	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 10000	15.3	42.0	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
≥ 9000	15.3	42.0	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
≥ 8000	16.7	46.7	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
≥ 7000	17.3	49.3	50.0	50.0	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
≥ 6000	17.3	49.3	50.0	50.0	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
≥ 5000	17.3	51.3	52.0	52.0	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 4500	18.7	52.7	53.3	53.3	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 4000	20.7	58.0	59.3	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 3500	21.3	58.7	60.0	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 3000	23.3	64.7	66.0	66.0	66.7	66.7	66.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 2500	25.3	69.3	70.7	70.7	71.3	71.3	71.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 2000	26.7	74.0	75.3	75.3	76.0	76.0	76.0	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 1800	26.7	74.0	75.3	75.3	76.7	76.7	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 1500	30.0	84.7	86.0	86.0	87.3	87.3	87.3	88.0	88.0	88.0	88.0	88.0	88.0	88.0
≥ 1200	31.3	86.7	88.0	88.0	89.3	89.3	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 1000	32.7	90.0	91.3	91.3	92.7	92.7	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 900	32.7	90.0	91.3	92.0	93.3	93.3	93.3	94.7	95.3	95.3	95.3	95.3	95.3	95.3
≥ 800	32.7	90.0	91.3	92.0	93.3	93.3	93.3	94.7	95.3	95.3	95.3	95.3	95.3	95.3
≥ 700	32.7	91.3	92.7	93.3	95.3	95.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 600	32.7	92.0	93.3	94.7	96.7	96.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	99.3
≥ 500	32.7	92.0	93.3	94.7	96.7	96.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	99.3
≥ 400	32.7	92.0	93.3	94.7	96.7	96.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	99.3
≥ 300	32.7	92.0	93.3	94.7	96.7	96.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	99.3
≥ 200	32.7	92.0	93.3	94.7	96.7	96.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	99.3
≥ 100	32.7	92.0	93.3	94.7	96.7	96.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	99.3
0	32.7	92.0	93.3	94.7	96.7	96.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

## CEILING VERSUS VISIBILITY

42215  
STATIONFUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

APR  
MONTHPERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)15  
HOURS (L S T)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	11.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
≥ 20000	16.7	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
≥ 18000	16.7	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
≥ 16000	16.7	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
≥ 14000	16.7	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
≥ 12000	18.0	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
≥ 10000	20.0	43.3	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 9000	20.0	43.3	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 8000	22.7	50.0	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
≥ 7000	23.3	52.0	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 6000	23.3	52.0	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 5000	23.3	53.3	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 4500	24.0	54.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 4000	24.7	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 3500	24.7	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 3000	26.0	64.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 2500	28.7	70.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 2000	28.7	75.3	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 1800	28.7	75.3	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 1500	33.3	83.3	84.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
≥ 1200	34.0	87.3	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 1000	34.7	91.3	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 900	34.7	92.0	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 800	34.7	92.0	94.0	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 700	34.7	92.0	94.0	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 600	34.7	92.0	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 500	34.7	92.0	94.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 400	34.7	92.0	94.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 300	34.7	92.0	94.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 200	34.7	92.0	94.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 100	34.7	92.0	94.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 0	34.7	92.0	94.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

APR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (L S T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	12.7	26.7	28.7	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
≥ 20000	16.0	36.7	36.7	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
≥ 18000	16.0	36.7	36.7	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
≥ 16000	16.0	37.3	37.3	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
≥ 14000	16.0	38.0	38.0	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 12000	16.7	40.7	40.7	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 10000	22.0	50.0	50.0	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
≥ 9000	22.0	50.7	50.7	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 8000	23.3	54.7	54.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 7000	23.3	56.0	56.0	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
≥ 6000	23.3	56.0	56.0	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
≥ 5000	24.0	58.7	58.7	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 4500	24.0	59.3	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 4000	24.0	63.3	63.3	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
≥ 3500	24.7	66.0	66.0	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 3000	26.7	70.0	70.0	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 2500	27.3	74.7	74.7	76.7	77.3	77.3	77.3	78.0	78.0	78.0	78.0	78.0	78.0
≥ 2000	28.0	78.7	78.7	80.7	81.3	81.3	81.3	82.0	82.0	82.0	82.0	82.0	82.0
≥ 1800	28.0	78.7	78.7	80.7	81.3	81.3	81.3	82.0	82.0	82.0	82.0	82.0	82.0
≥ 1500	30.0	82.0	82.7	84.7	85.3	85.3	85.3	86.0	86.0	86.0	86.0	86.0	86.0
≥ 1200	30.0	85.3	86.7	89.3	90.0	90.0	90.0	90.7	90.7	90.7	90.7	90.7	90.7
≥ 1000	30.0	88.0	89.3	92.0	92.7	92.7	93.3	94.0	94.0	94.0	94.0	94.0	94.0
≥ 900	30.0	88.0	90.7	93.3	94.0	94.0	94.0	95.3	95.3	95.3	95.3	95.3	95.3
≥ 800	30.0	88.0	90.7	93.3	94.0	94.0	94.0	95.3	95.3	95.3	95.3	95.3	95.3
≥ 700	30.0	89.3	92.0	94.7	96.0	96.0	96.0	97.3	97.3	97.3	97.3	97.3	97.3
≥ 600	30.0	90.0	92.7	95.3	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0
≥ 500	30.0	90.7	93.3	96.0	98.0	98.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	30.0	90.7	93.3	96.0	98.0	98.0	98.0	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	30.0	90.7	94.0	96.7	98.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	30.0	90.7	94.0	96.7	98.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	30.0	90.7	94.0	96.7	98.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0
0	30.0	90.7	94.0	96.7	98.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

APR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

21  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	≥ 0
NO CEILING	3.3	38.0	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 20000	4.7	41.3	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
≥ 18000	4.7	41.3	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
≥ 16000	4.7	41.3	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
≥ 14000	4.7	41.3	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
≥ 12000	5.3	44.7	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 10000	6.0	52.0	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 9000	6.0	52.0	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 8000	6.0	58.0	59.3	59.3	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 7000	6.0	59.3	61.3	61.3	61.3	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 6000	6.0	60.0	62.0	62.0	62.0	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 5000	6.0	62.0	64.0	64.0	64.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 4500	6.0	62.0	64.0	64.0	64.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 4000	6.0	64.7	67.3	67.3	67.3	68.0	68.0	68.0	68.0	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 3500	6.0	65.3	68.0	68.0	68.0	68.7	68.7	68.7	68.7	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 3000	6.0	69.3	72.0	72.0	72.0	72.7	72.7	72.7	72.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3
≥ 2500	6.0	73.3	76.0	76.0	76.0	76.7	76.7	76.7	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 2000	6.0	76.0	78.7	78.7	78.7	79.3	79.3	79.3	79.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1800	6.0	76.0	78.7	78.7	78.7	79.3	79.3	79.3	79.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1500	6.0	83.3	87.3	87.3	88.0	88.7	88.7	88.7	88.7	89.3	89.3	89.3	89.3	89.3	89.3	89.3
≥ 1200	6.7	86.7	90.7	90.7	91.3	92.0	92.0	92.0	92.0	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 1000	6.7	88.0	92.0	92.7	93.3	94.0	94.0	94.0	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 900	6.7	88.7	92.7	93.3	94.0	94.7	94.7	94.7	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 800	6.7	91.3	95.3	96.0	96.7	97.3	97.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 700	6.7	91.3	95.3	96.0	96.7	97.3	97.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 600	6.7	92.0	96.0	96.7	97.3	98.0	98.0	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	6.7	92.7	96.7	97.3	98.0	98.7	98.7	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	6.7	92.7	96.7	97.3	98.0	98.7	98.7	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	6.7	92.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	6.7	92.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	6.7	92.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	6.7	92.7	96.7	98.0	98.7	99.3	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

APR  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (L S T)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 0
NO CEILING	6.8	30.2	30.7	30.9	30.9	31.0	31.0	31.0	31.0	31.0	31.0	31.0
≥ 20000	8.8	34.8	35.3	35.7	35.7	35.8	35.8	35.8	35.8	35.8	35.8	35.8
≥ 18000	8.8	34.8	35.3	35.7	35.7	35.8	35.8	35.8	35.8	35.8	35.8	35.8
≥ 16000	8.8	34.8	35.4	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
≥ 14000	8.8	35.3	35.8	36.2	36.2	36.3	36.3	36.3	36.3	36.3	36.3	36.3
≥ 12000	10.1	38.1	38.7	39.0	39.0	39.1	39.1	39.1	39.1	39.1	39.1	39.1
≥ 10000	11.1	44.8	45.4	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 9000	11.1	44.9	45.7	46.0	46.0	46.1	46.1	46.1	46.1	46.1	46.1	46.1
≥ 8000	11.9	50.8	51.8	52.2	52.2	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 7000	12.1	52.4	53.4	53.8	53.9	54.1	54.1	54.2	54.2	54.2	54.2	54.2
≥ 6000	12.1	52.8	53.8	54.2	54.3	54.4	54.4	54.5	54.5	54.5	54.5	54.5
≥ 5000	12.2	54.7	55.8	56.2	56.3	56.4	56.4	56.5	56.5	56.5	56.5	56.5
≥ 4500	12.6	55.8	56.9	57.3	57.4	57.6	57.6	57.7	57.7	57.7	57.7	57.7
≥ 4000	13.1	59.5	60.8	61.3	61.3	61.5	61.5	61.6	61.6	61.7	61.7	61.7
≥ 3500	13.3	60.9	62.3	62.8	62.9	63.1	63.1	63.2	63.2	63.3	63.3	63.3
≥ 3000	14.1	65.2	66.7	67.2	67.3	67.4	67.4	67.8	67.8	67.8	67.8	67.8
≥ 2500	14.9	69.7	71.4	72.1	72.3	72.6	72.6	72.9	72.9	73.0	73.0	73.0
≥ 2000	15.4	74.2	75.9	76.6	76.8	77.1	77.1	77.4	77.4	77.5	77.5	77.5
≥ 1800	15.4	74.3	76.0	76.7	77.0	77.3	77.3	77.6	77.6	77.7	77.7	77.7
≥ 1500	16.8	80.7	82.9	83.8	84.2	84.4	84.6	84.9	84.9	85.0	85.0	85.0
≥ 1200	17.4	83.4	85.9	86.8	87.3	87.5	87.7	88.0	88.0	88.1	88.1	88.1
≥ 900	17.9	87.2	90.2	91.4	91.8	92.1	92.4	92.8	92.8	92.9	92.9	92.9
≥ 800	17.9	87.8	91.2	92.6	93.1	93.3	93.8	94.2	94.2	94.3	94.3	94.3
≥ 700	17.9	88.5	91.9	93.5	94.0	94.3	94.7	95.1	95.1	95.2	95.2	95.2
≥ 600	17.9	89.1	92.8	94.4	95.3	95.6	96.0	96.4	96.4	96.6	96.6	96.6
≥ 500	17.9	89.3	93.0	94.9	95.9	96.2	96.7	97.1	97.1	97.3	97.3	97.3
≥ 400	17.9	90.0	93.9	96.1	97.2	97.6	98.3	98.7	98.7	98.9	98.9	98.9
≥ 300	17.9	90.1	94.1	96.3	97.3	97.8	98.4	98.8	98.8	99.2	99.2	99.2
≥ 200	17.9	90.2	94.3	96.5	97.7	98.1	98.8	99.2	99.2	99.7	99.7	99.7
≥ 100	17.9	90.2	94.3	96.6	97.8	98.2	98.9	99.3	99.3	99.8	99.8	99.8
0	17.9	90.2	94.3	96.6	97.8	98.2	98.9	99.3	99.3	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

1200

DIRNAVOCEANMET SMOS



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAY  
MONTH

00  
HOURS (LST)

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	3.9	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 20000	4.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 18000	4.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 16000	4.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 14000	4.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 12000	4.5	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 10000	4.5	41.9	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
≥ 9000	4.5	42.6	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 8000	5.2	53.6	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
≥ 7000	5.2	56.8	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 6000	5.2	58.1	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 5000	5.2	58.1	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 4500	5.2	60.0	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 4000	5.2	61.9	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 3500	5.8	63.2	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 3000	5.8	67.7	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 2500	5.8	69.7	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 2000	5.8	71.0	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 1800	5.8	71.0	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 1500	5.8	76.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 1200	5.8	76.8	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 1000	5.8	83.9	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 900	5.8	85.2	87.1	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 800	5.8	85.2	87.1	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 700	5.8	86.5	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 600	5.8	87.1	91.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 500	6.5	87.7	92.3	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 400	6.5	87.7	92.3	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 300	6.5	87.7	92.3	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 200	6.5	87.7	92.3	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 100	6.5	87.7	92.3	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
0	6.5	87.7	92.3	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAY  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

03  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	≥ 0
NO CEILING	1.9	29.7	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 20000	2.6	34.2	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 18000	2.6	34.2	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 16000	2.6	34.2	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 14000	2.6	34.2	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 12000	2.6	36.8	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 10000	2.6	43.9	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 9000	2.6	43.9	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
≥ 8000	3.2	51.6	52.9	52.9	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
≥ 7000	3.9	54.8	56.1	56.1	56.8	56.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 6000	3.9	54.8	56.1	56.1	56.8	56.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 5000	3.9	56.8	58.1	58.1	58.7	58.7	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 4500	3.9	56.8	58.1	58.1	58.7	58.7	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 4000	3.9	60.0	61.3	61.3	62.6	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 3500	3.9	60.7	61.9	61.9	63.2	63.2	63.9	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 3000	3.9	65.2	66.5	67.7	68.4	68.4	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 2500	3.9	68.4	69.7	71.0	71.6	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 2000	4.5	71.6	72.9	74.2	74.8	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 1800	4.5	71.6	72.9	74.2	74.8	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 1500	4.5	74.2	75.5	76.8	77.4	77.4	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 1200	4.5	76.1	77.4	78.7	79.4	79.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1000	4.5	82.6	83.9	85.2	86.5	86.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 900	4.5	83.2	84.5	85.8	87.1	87.1	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 800	4.5	84.5	85.8	87.1	89.0	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 700	4.5	85.8	87.7	89.0	91.6	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 600	4.5	87.1	89.0	90.3	92.9	92.9	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 500	4.5	88.4	91.0	93.6	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 400	4.5	89.0	92.3	94.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	4.5	89.0	92.3	94.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	4.5	89.0	92.3	94.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	4.5	89.0	92.3	94.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 0	4.5	89.0	92.3	94.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAY  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	5.2	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	27.1	27.1	27.1
≥ 20000	6.5	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.9	32.9	32.9
≥ 18000	6.5	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	33.6	33.6	33.6
≥ 16000	6.5	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	33.6	33.6	33.6
≥ 14000	6.5	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.8	34.8	34.8
≥ 12000	7.1	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	37.4	37.4	37.4
≥ 10000	7.1	44.5	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.8	45.8	45.8
≥ 9000	7.1	44.5	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.8	45.8	45.8
≥ 8000	8.4	54.8	55.5	55.5	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.8	56.8	56.8
≥ 7000	9.7	56.1	56.8	56.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	58.1	58.1	58.1
≥ 6000	9.7	56.8	57.4	57.4	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.7	58.7	58.7
≥ 5000	9.7	56.8	57.4	57.4	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.7	58.7	58.7
≥ 4500	9.7	57.4	58.1	58.1	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	59.4	59.4	59.4
≥ 4000	9.7	57.4	58.1	58.1	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	59.4	59.4	59.4
≥ 3500	10.3	59.4	60.0	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.9	61.9	61.9
≥ 3000	10.3	63.9	64.5	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	66.5	66.5	66.5
≥ 2500	10.3	66.5	67.1	67.7	68.4	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.7	69.7	69.7
≥ 2000	10.3	67.7	68.4	69.0	69.7	70.3	70.3	70.3	70.3	70.3	70.3	70.3	71.0	71.0	71.0
≥ 1800	10.3	67.7	68.4	69.0	69.7	70.3	70.3	70.3	70.3	70.3	70.3	70.3	71.0	71.0	71.0
≥ 1500	10.3	72.9	74.8	75.5	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	77.4	77.4	77.4
≥ 1200	10.3	74.2	76.1	77.4	78.1	78.7	78.7	78.7	78.7	78.7	78.7	78.7	79.4	79.4	79.4
≥ 1000	10.3	78.1	80.7	82.6	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	85.2	85.2	85.2
≥ 900	10.3	81.3	83.9	85.8	87.1	87.7	87.7	87.7	87.7	87.7	87.7	87.7	88.4	88.4	88.4
≥ 800	10.3	83.2	85.8	88.4	89.7	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.6	91.6	91.6
≥ 700	10.3	83.9	87.1	89.7	91.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	93.6	93.6	93.6
≥ 600	10.3	85.2	89.0	92.3	93.6	94.2	94.8	94.8	94.8	94.8	94.8	94.8	96.1	96.1	96.1
≥ 500	10.3	85.8	89.7	93.6	94.8	95.5	96.8	96.8	96.8	96.8	96.8	96.8	98.1	98.1	98.1
≥ 400	10.3	86.5	90.3	94.2	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	99.4	99.4	99.4
≥ 300	10.3	86.5	90.3	94.2	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	99.4	99.4	99.4
≥ 200	10.3	86.5	91.0	94.8	96.8	97.4	98.7	98.7	98.7	98.7	98.7	98.7	100.0	100.0	100.0
≥ 100	10.3	86.5	91.0	94.8	96.8	97.4	98.7	98.7	98.7	98.7	98.7	98.7	100.0	100.0	100.0
≥ 0	10.3	86.5	91.0	94.8	96.8	97.4	98.7	98.7	98.7	98.7	98.7	98.7	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAY  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09  
HOURS (L.S.T.)

		VISIBILITY (STATUTE MILES)													
CEILING (FEET)		≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ 5/16	≥ ¼	≥ 0
NO CEILING		5.8	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
≥ 20000		11.0	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
≥ 18000		11.0	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
≥ 16000		11.0	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
≥ 14000		11.0	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
≥ 12000		11.6	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 10000		12.3	32.9	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6
≥ 9000		12.9	34.2	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 8000		13.6	40.7	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 7000		15.5	43.2	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 6000		15.5	43.9	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
≥ 5000		15.5	45.2	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
≥ 4500		16.1	45.8	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1
≥ 4000		16.1	46.5	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 3500		16.8	47.7	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 3000		17.4	50.3	51.6	51.6	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 2500		19.4	54.8	56.1	56.1	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
≥ 2000		20.7	58.7	60.0	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 1800		20.7	58.7	60.0	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 1500		22.6	66.5	69.0	69.0	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
≥ 1200		23.2	72.3	74.8	74.8	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 1000		25.2	80.0	82.6	83.2	84.5	84.5	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 900		25.8	80.7	83.2	83.9	85.2	85.2	85.2	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 800		25.8	81.9	84.5	86.5	88.4	88.4	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 700		25.8	83.9	86.5	88.4	91.0	91.0	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 600		25.8	86.5	89.0	91.6	94.2	94.2	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 500		25.8	86.5	89.0	91.6	94.2	94.2	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 400		25.8	86.5	89.7	92.9	95.5	95.5	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 300		25.8	86.5	89.7	93.6	96.1	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 200		25.8	86.5	89.7	93.6	96.1	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 100		25.8	86.5	89.7	93.6	96.1	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 0		25.8	86.5	89.7	93.6	96.1	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAY  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

12  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	6.5	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7
≥ 20000	8.4	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9
≥ 18000	9.0	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
≥ 16000	9.0	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
≥ 14000	9.0	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
≥ 12000	11.6	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
≥ 10000	12.9	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 9000	14.2	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 8000	20.7	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
≥ 7000	21.9	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
≥ 6000	21.9	48.4	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 5000	21.9	49.0	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
≥ 4500	21.9	49.7	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
≥ 4000	22.6	52.3	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 3500	22.6	52.3	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 3000	22.6	54.8	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 2500	27.1	63.9	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 2000	29.0	69.0	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
≥ 1800	29.0	69.7	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 1500	31.6	81.3	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 1200	32.3	84.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 1000	32.9	89.0	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 900	32.9	89.7	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 800	32.9	90.3	92.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 700	32.9	91.0	92.9	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 600	32.9	91.0	92.9	94.2	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 500	32.9	91.6	94.2	95.5	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 400	32.9	91.6	94.2	95.5	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	32.9	91.6	94.2	95.5	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	32.9	91.6	94.2	95.5	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	32.9	91.6	94.2	95.5	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
0	32.9	91.6	94.2	95.5	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAY  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

15  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	¾	≥ ¾	≥ ½	≥ 5/16
NO CEILING	7.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1
≥ 20000	10.3	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
≥ 18000	10.3	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
≥ 16000	10.3	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
≥ 14000	11.0	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 12000	14.2	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 10000	16.1	40.7	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 9000	16.8	41.9	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
≥ 8000	20.7	52.9	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 7000	20.7	54.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 6000	20.7	54.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 5000	21.3	56.1	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 4500	21.3	56.8	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 4000	22.6	59.4	60.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 3500	23.2	60.7	61.9	61.9	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 3000	23.9	62.6	63.9	63.9	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 2500	25.2	66.5	67.7	67.7	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 2000	27.1	70.3	71.6	71.6	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
≥ 1800	27.7	71.0	72.3	72.3	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 1500	29.7	78.1	80.0	80.0	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 1200	32.9	83.9	86.5	86.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 1000	32.9	87.7	90.3	91.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 900	32.9	88.4	91.6	92.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 800	32.9	89.0	92.9	93.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 700	32.9	89.0	92.9	93.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 600	32.9	90.3	94.2	94.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 500	32.9	90.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 400	32.9	90.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 300	32.9	90.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 200	32.9	90.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 100	32.9	90.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 0	32.9	90.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAY  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	9.7	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6
≥ 20000	12.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 18000	12.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 16000	12.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 14000	13.6	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 12000	14.2	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 10000	14.8	43.9	43.9	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 9000	15.5	45.2	45.2	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 8000	19.4	53.6	53.6	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
≥ 7000	20.0	57.4	58.1	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 6000	20.0	58.1	58.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 5000	20.7	60.0	60.7	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 4500	21.3	61.9	62.6	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
≥ 4000	21.9	65.2	65.8	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 3500	21.9	65.8	66.5	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 3000	21.9	65.8	66.5	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 2500	22.6	69.7	70.3	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 2000	23.2	72.9	73.6	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 1800	23.2	72.9	73.6	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 1500	24.5	78.1	79.4	81.3	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 1200	25.2	80.7	82.6	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 1000	25.8	85.2	87.1	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 900	25.8	85.2	88.4	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 800	25.8	85.8	89.0	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 700	25.8	87.7	92.3	94.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 600	25.8	88.4	92.9	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 500	25.8	89.0	93.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	25.8	89.0	93.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	25.8	89.0	93.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	25.8	89.0	93.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	25.8	89.0	93.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 0	25.8	89.0	93.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAY  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

21  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	¾	½	≥ 5/16	≥ ¼
NO CEILING	5.8	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 20000	7.1	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 18000	7.1	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 16000	7.1	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 14000	7.1	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 12000	8.4	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 10000	8.4	40.0	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 9000	8.4	41.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 8000	9.7	55.5	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 7000	9.7	58.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 6000	9.7	59.4	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 5000	9.7	59.4	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 4500	9.7	60.0	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 4000	9.7	61.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
≥ 3500	10.3	63.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 3000	10.3	65.2	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 2500	10.3	68.4	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 2000	10.3	74.8	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 1800	10.3	74.8	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 1500	10.3	77.4	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 1200	10.3	80.0	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 1000	11.0	85.2	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 900	11.0	85.8	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 800	11.0	85.8	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 700	11.0	86.5	92.3	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 600	11.0	86.5	92.3	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 500	11.0	86.5	92.3	93.6	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 400	11.0	87.7	94.2	96.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	11.0	87.7	94.2	96.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	11.0	87.7	94.2	96.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	11.0	87.7	94.2	96.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	11.0	87.7	94.2	96.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

MAY  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	≥ 0
NO CEILING	5.7	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.1	24.1	24.1	24.1
≥ 20000	7.9	29.8	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	30.0	30.0	30.0	30.0
≥ 18000	8.0	30.1	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2
≥ 16000	8.0	30.1	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2
≥ 14000	8.2	30.7	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
≥ 12000	9.3	34.3	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
≥ 10000	9.8	40.3	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.2	41.2	41.2	41.2
≥ 9000	10.2	41.3	42.2	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3
≥ 8000	12.6	51.1	52.1	52.3	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.5	52.5	52.5	52.5
≥ 7000	13.3	53.7	54.8	54.9	55.1	55.1	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2
≥ 6000	13.3	54.2	55.3	55.5	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.8	55.8	55.8	55.8
≥ 5000	13.5	55.2	56.3	56.5	56.6	56.6	56.7	56.7	56.7	56.7	56.7	56.7	56.8	56.8	56.8	56.8
≥ 4500	13.6	56.1	57.2	57.3	57.6	57.6	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7
≥ 4000	14.0	58.1	59.2	59.4	59.7	59.7	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
≥ 3500	14.4	59.1	60.2	60.7	61.0	61.0	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
≥ 3000	14.5	61.9	63.1	63.5	63.8	63.8	63.9	63.9	63.9	63.9	63.9	63.9	64.0	64.0	64.0	64.0
≥ 2500	15.6	66.0	67.3	67.7	68.2	68.3	68.4	68.4	68.4	68.4	68.4	68.4	68.5	68.5	68.5	68.5
≥ 2000	16.4	69.5	70.9	71.4	71.9	71.9	72.0	72.0	72.0	72.0	72.1	72.1	72.2	72.2	72.2	72.2
≥ 1800	16.5	69.7	71.1	71.5	72.0	72.1	72.2	72.2	72.2	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 1500	17.4	75.6	77.7	78.2	78.8	78.9	79.0	79.0	79.0	79.0	79.0	79.0	79.1	79.1	79.1	79.1
≥ 1200	18.1	78.6	80.9	81.5	82.1	82.2	82.3	82.3	82.3	82.5	82.5	82.5	82.6	82.6	82.6	82.6
≥ 1000	18.6	84.0	86.5	87.5	88.2	88.3	88.4	88.6	88.6	88.8	88.8	88.8	88.9	88.9	88.9	88.9
≥ 900	18.6	84.9	87.7	88.8	89.5	89.6	89.7	89.9	89.9	90.2	90.2	90.2	90.3	90.3	90.3	90.3
≥ 800	18.6	85.7	88.6	89.9	90.8	90.9	91.1	91.3	91.3	91.5	91.6	91.6	91.7	91.7	91.7	91.7
≥ 700	18.6	86.8	90.1	91.6	92.8	93.0	93.2	93.5	93.5	93.8	93.9	93.9	94.0	94.0	94.0	94.0
≥ 600	18.6	87.7	91.3	93.1	94.5	94.7	94.9	95.2	95.2	95.7	95.7	95.7	95.8	95.8	95.8	95.8
≥ 500	18.7	88.2	92.0	94.2	96.0	96.2	96.7	97.0	97.0	97.7	97.9	97.9	98.1	98.1	98.1	98.1
≥ 400	18.7	88.6	92.6	94.9	96.8	97.1	97.6	97.9	97.9	98.6	98.9	98.9	99.0	99.0	99.0	99.0
≥ 300	18.7	88.6	92.6	95.0	96.9	97.3	97.8	98.2	98.2	99.1	99.4	99.4	99.6	99.6	99.6	99.6
≥ 200	18.7	88.6	92.7	95.2	97.1	97.4	98.0	98.3	98.3	99.4	99.7	99.7	99.8	99.8	99.8	99.8
≥ 100	18.7	88.6	92.7	95.2	97.1	97.4	98.0	98.3	98.3	99.4	99.7	99.7	99.9	99.9	99.9	99.9
≥ 0	18.7	88.6	92.7	95.2	97.1	97.4	98.0	98.3	98.3	99.4	99.7	99.7	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

1240



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

00  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	1.3	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
≥ 20000	2.0	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
≥ 18000	2.0	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
≥ 16000	2.0	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
≥ 14000	2.0	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
≥ 12000	2.0	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
≥ 10000	2.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 9000	2.7	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
≥ 8000	3.3	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
≥ 7000	3.3	54.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 6000	3.3	55.3	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
≥ 5000	3.3	56.0	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
≥ 4500	3.3	56.7	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
≥ 4000	3.3	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 3500	3.3	61.3	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 3000	3.3	64.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 2500	3.3	65.3	66.0	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
≥ 2000	3.3	68.0	68.7	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 1800	3.3	68.0	68.7	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 1500	3.3	76.7	78.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 1200	3.3	80.0	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 1000	3.3	87.3	90.0	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
≥ 900	3.3	88.0	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 800	3.3	88.0	92.0	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 700	3.3	90.0	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 600	3.3	90.7	95.3	96.0	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 500	3.3	92.7	97.3	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	3.3	92.7	97.3	98.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	3.3	92.7	97.3	98.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	3.3	92.7	97.3	98.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	3.3	92.7	97.3	98.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	3.3	92.7	97.3	98.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

72-77

YEARS

JUN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

03  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	1.3	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
≥ 20000	1.3	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
≥ 18000	1.3	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
≥ 16000	1.3	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
≥ 14000	1.3	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
≥ 12000	1.3	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
≥ 10000	1.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 9000	1.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
≥ 8000	1.3	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 7000	1.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 6000	1.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 5000	1.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
≥ 4500	1.3	47.3	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
≥ 4000	1.3	50.7	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 3500	1.3	52.7	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
≥ 3000	1.3	55.3	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
≥ 2500	2.0	57.3	58.0	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 2000	2.0	58.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 1800	2.0	58.7	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 1500	2.0	67.3	70.0	70.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 1200	2.0	70.7	73.3	74.0	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
≥ 1000	2.0	82.0	86.0	86.7	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
≥ 900	2.0	86.0	90.0	90.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 800	2.0	87.3	92.0	92.7	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 700	2.0	90.7	95.3	96.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 600	2.0	90.7	95.3	96.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 500	2.0	90.7	96.0	97.3	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	2.0	91.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	2.0	91.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	2.0	91.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	2.0	91.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	2.0	91.3	96.7	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	6.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
≥ 20000	6.0	26.7	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
≥ 18000	6.0	26.7	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
≥ 16000	6.0	26.7	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
≥ 14000	6.0	27.3	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
≥ 12000	6.0	28.7	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
≥ 10000	8.0	36.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 9000	8.0	37.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
≥ 8000	8.0	52.7	54.7	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 7000	9.3	56.7	58.7	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 6000	9.3	56.7	58.7	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 5000	9.3	57.3	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 4500	9.3	58.7	60.7	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 4000	10.0	62.0	64.7	66.0	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
≥ 3500	10.0	66.0	68.7	70.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
≥ 3000	10.0	69.3	72.7	74.0	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
≥ 2500	10.0	70.0	73.3	74.7	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
≥ 2000	10.0	72.7	76.7	78.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 1800	10.0	72.7	76.7	78.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 1500	10.7	76.7	80.7	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
≥ 1200	10.7	77.3	81.3	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 1000	11.3	82.0	87.3	88.7	90.7	90.7	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
≥ 900	11.3	84.0	89.3	90.7	92.7	92.7	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 800	11.3	85.3	90.7	92.0	94.0	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 700	11.3	88.7	94.0	95.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 600	11.3	90.7	96.0	97.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	11.3	90.7	96.0	97.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	11.3	90.7	96.0	97.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	11.3	90.7	96.0	97.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	11.3	90.7	96.0	97.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	11.3	90.7	96.0	97.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	11.3	90.7	96.0	97.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	4.7	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
≥ 20000	7.4	22.8	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
≥ 18000	7.4	22.8	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
≥ 16000	7.4	22.8	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
≥ 14000	7.4	23.5	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
≥ 12000	8.7	26.2	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9
≥ 10000	10.7	33.6	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 9000	10.7	34.2	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9
≥ 8000	12.8	42.3	43.0	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6
≥ 7000	12.8	43.0	44.3	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
≥ 6000	12.8	43.6	45.0	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3
≥ 5000	12.8	44.3	45.6	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
≥ 4500	12.8	44.3	45.6	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
≥ 4000	12.8	48.3	49.7	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
≥ 3500	14.8	51.7	53.0	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4
≥ 3000	14.8	54.4	55.7	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
≥ 2500	14.8	57.1	58.4	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7
≥ 2000	16.1	61.7	63.1	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
≥ 1800	16.1	63.1	64.4	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 1500	17.5	73.8	75.8	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
≥ 1200	18.1	79.9	81.9	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 1000	18.8	87.9	89.9	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
≥ 900	18.8	88.6	91.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 800	18.8	89.3	92.0	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 700	18.8	89.9	92.6	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 600	18.8	90.6	93.3	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
≥ 500	19.5	91.3	94.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 400	19.5	91.3	94.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 300	19.5	91.3	94.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 200	19.5	91.3	94.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 100	19.5	91.3	94.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 0	19.5	91.3	94.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0

TOTAL NUMBER OF OBSERVATIONS 149

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77  
YEARS

JUN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

12  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	6.0	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7
≥ 20000	6.7	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
≥ 18000	6.7	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
≥ 16000	6.7	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
≥ 14000	7.3	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
≥ 12000	8.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 10000	11.3	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
≥ 9000	12.0	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3	31.3
≥ 8000	14.7	39.3	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
≥ 7000	14.7	40.0	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 6000	14.7	40.0	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 5000	15.3	41.3	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
≥ 4500	15.3	42.0	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
≥ 4000	16.7	44.0	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 3500	17.3	46.7	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
≥ 3000	17.3	48.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
≥ 2500	19.3	52.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 2000	22.7	57.3	59.3	60.0	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 1800	22.7	58.0	60.0	60.7	60.7	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 1500	24.7	71.3	73.3	74.0	74.7	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 1200	26.0	80.7	83.3	84.0	84.7	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 1000	26.0	89.3	92.7	94.7	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 900	26.0	89.3	92.7	94.7	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 800	26.0	89.3	92.7	94.7	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 700	26.0	89.3	92.7	94.7	95.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 600	26.7	90.0	93.3	95.3	96.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 500	26.7	90.0	93.3	95.3	96.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 400	26.7	90.0	93.3	95.3	96.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 300	26.7	90.0	93.3	95.3	96.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 200	26.7	90.0	93.3	95.3	96.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 100	26.7	90.0	93.3	95.3	96.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
0	26.7	90.0	93.3	95.3	96.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3

TOTAL NUMBER OF OBSERVATIONS

150

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

## CEILING VERSUS VISIBILITY

42215  
STATIONFUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUN  
MONTHPERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)15  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	5.3	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
≥ 20000	8.7	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
≥ 18000	8.7	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
≥ 16000	9.3	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 14000	9.3	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
≥ 12000	9.3	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
≥ 10000	11.3	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
≥ 9000	11.3	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
≥ 8000	12.7	42.7	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
≥ 7000	13.3	44.7	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 6000	13.3	44.7	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 5000	13.3	46.0	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
≥ 4500	13.3	46.0	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
≥ 4000	13.3	48.7	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 3500	14.7	51.3	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
≥ 3000	14.7	53.3	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 2500	16.0	56.0	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
≥ 2000	18.0	62.7	64.0	64.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 1800	18.0	63.3	64.7	64.7	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
≥ 1500	20.7	78.0	79.3	80.0	80.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 1200	21.3	82.0	83.3	84.0	84.7	84.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
≥ 1000	22.7	89.3	91.3	92.7	93.3	93.3	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 900	22.7	90.0	92.0	93.3	94.0	94.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 800	22.7	90.0	92.0	94.0	94.7	94.7	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 700	22.7	90.0	92.0	94.0	95.3	95.3	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 600	22.7	90.7	92.7	94.7	96.0	96.0	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 500	22.7	90.7	93.3	96.0	97.3	97.3	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	22.7	90.7	93.3	96.7	98.0	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	22.7	90.7	93.3	96.7	98.0	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	22.7	90.7	93.3	96.7	98.0	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	22.7	90.7	93.3	96.7	98.0	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	22.7	90.7	93.3	96.7	98.0	98.0	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77  
YEARS

JUN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	≥ 0
NO CEILING	6.7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
≥ 20000	10.7	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
≥ 18000	10.7	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
≥ 16000	10.7	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
≥ 14000	10.7	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
≥ 12000	12.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
≥ 10000	13.3	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
≥ 9000	13.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
≥ 8000	14.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 7000	14.0	47.3	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
≥ 6000	14.0	47.3	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
≥ 5000	14.0	48.0	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 4500	14.0	49.3	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
≥ 4000	14.7	52.7	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 3500	14.7	54.0	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 3000	14.7	55.3	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
≥ 2500	14.7	57.3	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 2000	16.7	60.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 1800	16.7	61.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
≥ 1500	17.3	74.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 1200	17.3	78.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1000	17.3	85.3	88.7	90.7	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
≥ 900	17.3	86.0	89.3	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 800	17.3	86.7	90.0	91.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 700	17.3	87.3	90.7	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 600	17.3	88.0	92.0	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 500	17.3	89.3	93.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 400	17.3	89.3	93.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 300	17.3	89.3	93.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 200	17.3	89.3	93.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 100	17.3	89.3	93.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 0	17.3	89.3	93.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3

TOTAL NUMBER OF OBSERVATIONS

150



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUN  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

21  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	2.7	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
≥ 20000	4.0	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
≥ 18000	4.0	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
≥ 16000	4.0	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
≥ 14000	4.0	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
≥ 12000	4.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
≥ 10000	4.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
≥ 9000	4.0	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 8000	4.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 7000	4.0	56.0	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
≥ 6000	4.0	56.7	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
≥ 5000	4.0	58.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 4500	4.0	58.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 4000	4.0	61.3	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 3500	4.0	64.7	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
≥ 3000	4.0	68.0	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 2500	4.0	70.7	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 2000	4.0	72.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 1800	4.0	72.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 1500	4.0	78.0	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 1200	4.0	81.3	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
≥ 1000	4.0	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 900	4.0	88.7	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
≥ 800	4.0	88.7	91.3	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 700	4.0	90.0	92.7	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 600	4.0	90.7	93.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 500	4.0	91.3	94.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 400	4.0	92.0	95.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 300	4.0	92.7	96.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	4.0	92.7	96.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	4.0	92.7	96.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	4.0	92.7	96.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

JUN  
MONTH

ALL  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	4.3	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6
≥ 20000	5.8	26.4	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
≥ 18000	5.8	26.4	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
≥ 16000	5.9	26.5	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7
≥ 14000	6.0	26.9	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 12000	6.5	28.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 10000	7.8	35.6	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 9000	7.9	37.5	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
≥ 8000	8.8	46.4	46.9	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
≥ 7000	9.1	48.5	49.5	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
≥ 6000	9.1	48.7	49.7	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
≥ 5000	9.2	49.9	51.0	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2
≥ 4500	9.2	50.4	51.5	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
≥ 4000	9.5	53.4	54.6	55.0	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1
≥ 3500	10.0	56.1	57.3	57.6	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7
≥ 3000	10.0	58.5	59.9	60.2	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
≥ 2500	10.5	60.7	62.2	62.7	62.8	62.8	62.8	62.8	62.8	62.8	62.8	62.8	62.8	62.8
≥ 2000	11.6	64.2	66.1	66.6	66.8	66.9	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
≥ 1800	11.6	64.7	66.6	67.1	67.3	67.5	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
≥ 1500	12.5	74.6	76.7	77.3	77.7	77.9	78.1	78.1	78.1	78.2	78.2	78.2	78.2	78.2
≥ 1200	12.8	78.7	80.9	81.7	82.1	82.2	82.4	82.4	82.4	82.5	82.5	82.5	82.5	82.5
≥ 1000	13.2	86.4	89.5	90.7	91.3	91.5	91.7	91.8	91.8	91.9	92.0	92.0	92.0	92.0
≥ 900	13.2	87.6	90.9	92.2	92.8	93.0	93.3	93.4	93.5	93.5	93.6	93.6	93.6	93.6
≥ 800	13.2	88.1	91.6	93.2	93.9	94.2	94.5	94.6	94.6	94.7	94.8	94.8	94.8	94.8
≥ 700	13.2	89.5	93.0	94.8	95.7	95.9	96.3	96.3	96.3	96.4	96.5	96.5	96.5	96.5
≥ 600	13.3	90.2	93.9	95.8	96.7	96.9	97.3	97.3	97.3	97.4	97.5	97.5	97.5	97.5
≥ 500	13.3	90.8	94.8	96.9	97.8	98.1	98.5	98.6	98.6	98.8	98.8	98.8	98.8	98.8
≥ 400	13.3	91.0	94.9	97.3	98.3	98.6	99.2	99.3	99.3	99.5	99.6	99.6	99.6	99.6
≥ 300	13.3	91.1	95.0	97.4	98.4	98.7	99.3	99.3	99.4	99.6	99.7	99.7	99.7	99.7
≥ 200	13.3	91.1	95.0	97.4	98.4	98.8	99.4	99.5	99.6	99.8	99.8	99.8	99.8	99.8
≥ 100	13.3	91.1	95.0	97.4	98.4	98.8	99.4	99.5	99.6	99.8	99.9	99.9	99.9	99.9
≥ 0	13.3	91.1	95.0	97.4	98.4	98.8	99.4	99.5	99.6	99.8	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS 1199

DIRNAVOCEANMET SMOS



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEHA, OKINAWA  
STATION NAME

73-77

YEARS

JUL  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

00  
HOURS (L S T)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	7.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 20000	9.0	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
≥ 18000	9.0	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
≥ 16000	9.0	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
≥ 14000	9.0	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
≥ 12000	9.0	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 10000	9.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 9000	9.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 8000	10.3	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 7000	10.3	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 6000	10.3	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 5000	10.3	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 4500	10.3	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 4000	10.3	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 3500	10.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 3000	10.3	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 2500	10.3	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 2000	11.0	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 1800	11.0	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 1500	11.0	88.4	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 1200	11.0	92.3	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1000	11.0	93.6	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 900	11.0	93.6	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 800	11.0	93.6	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 700	11.6	94.2	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 600	11.6	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 500	11.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	11.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	11.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	11.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	11.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 0	11.6	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77  
YEARS

JUL  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

03  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	≥ 0
NO CEILING	7.7	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
≥ 20000	7.7	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 18000	7.7	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 16000	7.7	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 14000	7.7	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 12000	8.4	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 10000	8.4	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
≥ 9000	8.4	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
≥ 8000	8.4	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 7000	8.4	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 6000	8.4	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 5000	8.4	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 4500	8.4	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 4000	8.4	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 3500	8.4	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 3000	9.0	78.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 2500	9.0	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 2000	9.7	81.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 1800	10.3	82.6	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 1500	10.3	87.1	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 1200	10.3	88.4	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 1000	10.3	89.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 900	10.3	89.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 800	10.3	89.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 700	11.0	89.7	92.9	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 600	11.0	89.7	92.9	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 500	11.0	90.3	93.6	94.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 400	11.0	90.3	94.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 300	11.0	90.3	94.8	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 200	11.0	90.3	94.8	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 100	11.0	90.3	94.8	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 0	11.0	90.3	94.8	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUL  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	
NO CEILING	14.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
≥ 20000	19.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 18000	19.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 16000	19.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 14000	19.4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 12000	20.0	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 10000	20.7	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 9000	20.7	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 8000	21.3	72.3	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
≥ 7000	21.3	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 6000	21.3	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 5000	21.3	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 4500	21.3	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 4000	21.3	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 3500	21.3	77.4	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 3000	21.3	79.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 2500	21.3	79.4	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 2000	21.3	80.7	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 1800	21.3	80.7	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 1500	21.9	85.2	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 1200	22.6	87.7	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 1000	22.6	89.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 900	23.2	90.3	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 800	23.2	90.3	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 700	23.2	91.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 600	23.2	91.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 500	23.2	91.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 400	23.2	91.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 300	23.2	91.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 200	23.2	91.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 100	23.2	91.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 0	23.2	91.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUL  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	¾	¾	¾	¾	¾	≥ 0
NO CEILING	18.1	30.3	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
≥ 20000	24.5	45.2	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 18000	24.5	45.2	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 16000	24.5	45.2	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 14000	24.5	46.5	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1
≥ 12000	24.5	47.1	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 10000	27.7	52.9	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
≥ 9000	28.4	54.2	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
≥ 8000	32.3	61.3	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 7000	32.9	63.9	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 6000	32.9	63.9	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 5000	32.9	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 4500	32.9	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 4000	32.9	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 3500	32.9	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 3000	33.6	66.5	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
≥ 2500	34.2	67.1	68.4	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 2000	36.8	72.9	74.2	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 1800	36.8	72.9	74.2	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 1500	39.4	83.9	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 1200	41.3	88.4	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 1000	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 900	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 800	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 700	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 600	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 500	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 400	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 300	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 200	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 100	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
0	41.3	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUL  
MONTH

12

HOURS (L.S.T.)

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 0
NO CEILING	16.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 20000	25.6	41.9	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 18000	25.8	41.9	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 16000	25.8	41.9	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 14000	25.8	42.6	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
≥ 12000	25.8	45.2	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 10000	28.4	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 9000	28.4	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 8000	32.3	56.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 7000	32.3	57.4	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 6000	32.3	58.1	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 5000	32.3	58.1	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 4500	32.3	58.1	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 4000	32.3	58.7	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 3500	32.9	60.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 3000	32.9	61.9	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 2500	34.2	63.9	64.5	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 2000	36.7	73.6	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 1800	38.7	73.6	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 1500	43.9	83.9	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 1200	43.9	86.5	88.4	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 1000	44.5	92.3	94.2	95.5	95.5	95.5	96.1	96.8	96.8	97.4	97.4	97.4	97.4	97.4
≥ 900	44.5	92.3	94.2	95.5	95.5	95.5	96.1	96.8	96.8	97.4	97.4	97.4	97.4	97.4
≥ 800	44.5	92.9	94.8	96.1	96.1	96.1	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1
≥ 700	44.5	92.9	94.8	96.1	96.1	96.1	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1
≥ 600	44.5	92.9	94.8	96.1	96.1	96.1	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1
≥ 500	44.5	92.9	94.8	96.1	96.1	96.1	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4
≥ 400	44.5	92.9	94.8	96.1	96.1	96.1	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4
≥ 300	44.5	92.9	94.8	96.1	96.1	96.1	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4
≥ 200	44.5	92.9	94.8	96.1	96.1	96.1	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4
≥ 100	44.5	92.9	94.8	96.1	96.1	96.1	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4
≥ 0	44.5	92.9	94.8	96.1	96.1	96.1	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUL  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

15  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	19.4	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 20000	24.5	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 18000	24.5	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 16000	24.5	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 14000	24.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 12000	26.5	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 10000	29.0	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 9000	29.0	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 8000	32.9	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 7000	32.9	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 6000	32.9	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 5000	32.9	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 4500	32.9	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 4000	33.6	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 3500	33.6	61.3	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 3000	35.5	64.5	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 2500	36.1	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 2000	41.3	73.6	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 1800	41.3	74.2	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 1500	44.5	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 1200	46.5	91.0	91.6	92.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1000	46.5	93.6	94.8	95.5	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	46.5	94.2	95.5	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	46.5	94.2	95.5	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	46.5	94.2	95.5	96.8	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 600	46.5	94.2	95.5	96.8	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	46.5	94.2	95.5	96.8	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	46.5	94.2	95.5	96.8	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	46.5	94.2	95.5	96.8	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	46.5	94.2	95.5	96.8	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	46.5	94.2	95.5	96.8	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 0	46.5	94.2	95.5	96.8	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUL  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	21.9	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 20000	27.1	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 18000	27.1	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 16000	27.1	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 14000	27.1	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
≥ 12000	28.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 10000	30.3	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 9000	30.3	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 8000	31.6	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 7000	32.3	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 6000	32.3	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
≥ 5000	32.3	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 4500	32.9	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 4000	32.9	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 3500	32.9	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 3000	33.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 2500	34.8	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 2000	38.1	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1800	38.1	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1500	41.3	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 1200	42.6	90.3	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 1000	42.6	92.3	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 900	42.6	92.3	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 800	42.6	92.9	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 700	42.6	92.9	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 600	42.6	92.9	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 500	42.6	92.9	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 400	42.6	92.9	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 300	42.6	92.9	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 200	42.6	92.9	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 100	42.6	92.9	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 0	42.6	92.9	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

JUL  
MONTH

21  
HOURS (L.S.T.)

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	12.3	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 20000	14.2	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 18000	14.2	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 16000	14.2	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 14000	14.2	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 12000	14.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 10000	14.2	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 9000	14.2	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 8000	14.8	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 7000	14.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 6000	14.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 5000	14.8	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 4500	14.8	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 4000	14.8	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 3500	14.8	76.1	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 3000	14.8	77.4	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 2500	16.1	80.0	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 2000	16.1	83.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 1800	16.1	83.2	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 1500	16.8	87.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 1200	16.8	89.7	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1000	17.4	92.9	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 900	17.4	92.9	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 800	17.4	92.9	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 700	17.4	92.9	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 600	17.4	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 500	17.4	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	17.4	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	17.4	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	17.4	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	17.4	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 0	17.4	94.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77  
YEARS

JUL  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	14.7	42.1	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2
≥ 20000	19.0	53.6	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
≥ 18000	19.0	53.6	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
≥ 16000	19.0	53.6	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
≥ 14000	19.0	54.4	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
≥ 12000	19.6	57.2	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
≥ 10000	21.0	61.6	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 9000	21.1	61.9	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
8000	23.0	67.0	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
7000	23.2	68.7	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
6000	23.2	69.0	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
5000	23.2	69.3	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
4500	23.2	69.4	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
4000	23.3	70.0	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4
3500	23.4	70.6	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1
3000	23.9	72.7	73.4	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
2500	24.5	74.0	74.8	74.9	74.9	74.9	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
2000	26.6	78.8	79.8	79.9	79.9	79.9	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
1800	26.7	79.0	79.9	80.1	80.1	80.1	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2
1500	28.6	86.1	87.6	87.7	87.8	87.8	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
1200	29.4	89.3	91.1	91.4	91.5	91.5	91.6	91.8	91.8	91.9	91.9	91.9	91.9	91.9
1000	29.5	92.0	94.1	94.5	94.8	94.8	95.1	95.2	95.2	95.3	95.3	95.3	95.3	95.4
900	29.6	92.2	94.3	94.7	95.0	95.1	95.5	95.7	95.7	95.7	95.8	95.8	95.8	96.0
800	29.6	92.3	94.5	95.0	95.3	95.4	95.8	96.1	96.1	96.1	96.2	96.2	96.2	96.5
700	29.8	92.6	94.8	95.3	95.7	95.7	96.1	96.4	96.4	96.5	96.5	96.7	96.7	97.1
600	29.8	93.1	95.2	96.0	96.4	96.5	96.9	97.2	97.2	97.3	97.3	97.5	97.5	97.9
500	29.8	93.2	95.4	96.2	96.6	96.7	97.1	97.3	97.3	97.6	97.9	98.1	98.1	98.6
400	29.8	93.2	95.5	96.3	96.9	97.1	97.6	98.2	98.3	98.6	98.7	99.1	99.1	99.8
300	29.8	93.2	95.6	96.4	96.9	97.2	97.7	98.2	98.4	98.6	98.8	99.3	99.3	99.8
200	29.8	93.2	95.6	96.4	96.9	97.2	97.7	98.2	98.4	98.6	98.8	99.4	99.4	99.8
100	29.8	93.2	95.6	96.4	96.9	97.2	97.7	98.2	98.4	98.6	98.8	99.4	99.4	99.8
0	29.8	93.2	95.6	96.4	96.9	97.2	97.7	98.2	98.4	98.6	98.8	99.4	99.4	99.8

TOTAL NUMBER OF OBSERVATIONS

1240

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

AUG  
MONTH

00  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	7.7	50.3	51.0	51.0	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 20000	8.4	60.7	61.3	61.3	61.3	61.9	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 18000	8.4	60.7	61.3	61.3	61.3	61.9	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 16000	8.4	60.7	61.3	61.3	61.3	61.9	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 14000	8.4	60.7	61.3	61.3	61.3	61.9	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 12000	8.4	60.7	61.3	61.3	61.3	61.9	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 10000	9.0	65.8	67.1	67.1	67.1	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
≥ 9000	9.0	65.8	67.1	67.1	67.1	67.7	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
≥ 8000	9.0	69.7	71.0	71.0	71.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 7000	9.0	69.7	71.0	71.0	71.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 6000	9.0	69.7	71.0	71.0	71.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 5000	9.0	69.7	71.0	71.0	71.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 4500	9.0	69.7	71.0	71.0	71.0	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 4000	9.0	70.3	71.6	71.6	71.6	72.3	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
≥ 3500	9.0	70.3	71.6	71.6	71.6	72.3	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
≥ 3000	9.0	70.3	71.6	71.6	71.6	72.3	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 2500	9.0	71.0	72.9	72.9	72.9	73.6	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 2000	9.0	71.0	72.9	72.9	72.9	73.6	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 1800	9.0	74.8	76.8	77.4	78.1	78.7	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1500	9.0	74.8	76.8	77.4	78.1	78.7	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1200	9.7	81.3	84.3	85.2	85.8	86.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 1000	11.0	84.5	87.7	88.4	89.0	89.7	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 900	11.0	91.0	94.2	94.8	95.5	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	11.0	91.0	94.2	94.8	95.5	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	11.0	91.0	94.2	94.8	95.5	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	11.0	91.0	94.2	94.8	95.5	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 500	11.0	91.0	94.2	94.8	95.5	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	11.0	91.0	94.2	94.8	95.5	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	11.0	91.0	94.2	94.8	95.5	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	11.0	91.0	94.2	94.8	95.5	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	11.0	91.0	94.2	94.8	95.5	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1
0	11.0	91.0	94.2	94.8	95.5	96.1	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

AUG  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

03  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	5.8	50.3	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
≥ 20000	5.8	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.9	61.9	61.9	61.9	61.9
≥ 18000	5.8	60.7	61.3	61.3	61.3	61.3	61.3	61.9	61.9	61.9	61.9	61.9	61.9
≥ 16000	5.8	60.7	61.3	61.3	61.3	61.3	61.3	61.9	61.9	61.9	61.9	61.9	61.9
≥ 14000	5.8	60.7	61.3	61.3	61.3	61.3	61.3	61.9	61.9	61.9	61.9	61.9	61.9
≥ 12000	5.8	61.3	61.9	61.9	61.9	61.9	61.9	62.6	62.6	62.6	62.6	62.6	62.6
≥ 10000	5.8	63.2	63.9	63.9	63.9	63.9	64.5	65.2	65.2	65.2	65.2	65.2	65.2
≥ 9000	5.8	63.2	63.9	63.9	63.9	63.9	64.5	65.2	65.2	65.2	65.2	65.2	65.2
≥ 8000	5.8	65.2	66.5	67.1	67.1	67.1	67.7	68.4	68.4	68.4	68.4	68.4	68.4
≥ 7000	5.8	65.2	66.5	67.1	67.1	67.1	67.7	68.4	68.4	68.4	68.4	68.4	68.4
≥ 6000	5.8	65.2	66.5	67.1	67.1	67.1	67.7	68.4	68.4	68.4	68.4	68.4	68.4
≥ 5000	5.8	65.2	66.5	67.1	67.1	67.1	67.7	68.4	68.4	68.4	68.4	68.4	68.4
≥ 4500	5.8	65.2	66.5	67.1	67.1	67.1	67.7	68.4	68.4	68.4	68.4	68.4	68.4
≥ 4000	5.8	65.8	67.1	67.7	67.7	67.7	68.4	69.0	69.0	69.0	69.0	69.0	69.0
≥ 3500	6.5	66.5	67.7	68.4	68.4	68.4	69.0	69.7	69.7	69.7	69.7	69.7	69.7
≥ 3000	6.5	68.4	69.7	70.3	70.3	70.3	71.0	71.6	71.6	71.6	71.6	71.6	71.6
≥ 2500	6.5	70.3	72.3	72.9	72.9	72.9	73.6	74.2	74.2	74.2	74.2	74.2	74.2
≥ 2000	6.5	74.2	76.1	76.8	76.8	76.8	77.4	78.1	78.1	78.1	78.1	78.1	78.1
≥ 1800	7.7	76.1	78.1	78.7	78.7	78.7	79.4	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1500	7.7	83.9	85.8	86.5	86.5	86.5	87.1	87.7	87.7	87.7	87.7	87.7	87.7
≥ 1200	7.7	87.1	89.0	89.7	89.7	89.7	90.3	91.0	91.6	91.6	91.6	91.6	91.6
≥ 1000	7.7	92.9	94.8	95.5	95.5	95.5	96.1	96.8	97.4	98.1	98.1	98.1	98.1
≥ 900	7.7	92.9	94.8	95.5	95.5	95.5	96.1	96.8	97.4	98.1	98.1	98.1	98.1
≥ 800	7.7	92.9	94.8	95.5	95.5	95.5	96.1	96.8	97.4	98.1	98.1	98.1	98.1
≥ 700	7.7	92.9	94.8	95.5	95.5	95.5	96.1	96.8	97.4	98.1	98.1	98.1	98.1
≥ 600	7.7	92.9	94.8	95.5	95.5	95.5	96.1	96.8	97.4	98.1	98.1	98.1	98.1
≥ 500	7.7	92.9	94.8	95.5	95.5	95.5	96.1	96.8	97.4	98.1	98.1	98.1	98.1
≥ 400	7.7	92.9	94.8	95.5	95.5	95.5	96.1	96.8	97.4	98.1	98.1	98.1	98.1
≥ 300	7.7	92.9	95.5	96.8	96.8	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	7.7	92.9	95.5	96.8	96.8	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	7.7	92.9	95.5	96.8	96.8	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1
≥ 0	7.7	92.9	95.5	96.8	96.8	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

AUG  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	≥ 0
NO CEILING	11.0	42.6	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 20000	11.6	58.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 18000	11.6	58.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 16000	11.6	58.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 14000	11.6	58.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 12000	12.3	60.0	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 10000	12.3	62.6	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 9000	12.3	62.6	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 8000	12.3	65.8	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 7000	12.3	66.5	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
≥ 6000	12.9	67.1	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 5000	12.9	67.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 4500	12.9	67.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 4000	12.9	68.4	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
≥ 3500	12.9	69.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 3000	12.9	69.7	71.6	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 2500	12.9	70.3	72.9	72.9	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 2000	12.9	75.5	78.1	78.1	79.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 1800	12.9	76.8	79.4	79.4	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 1500	13.6	82.6	85.2	85.2	87.1	87.7	87.7	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 1200	14.8	87.7	91.0	91.0	92.9	93.6	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1000	14.8	91.0	94.2	94.2	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 900	14.8	91.0	94.2	94.2	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	14.8	91.0	94.2	94.2	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	14.8	91.0	94.2	94.2	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	14.8	91.0	94.2	94.2	96.8	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	14.8	91.0	94.2	94.2	96.8	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	14.8	91.0	94.2	94.2	96.8	98.1	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	14.8	91.0	94.8	95.5	97.4	98.7	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	14.8	91.0	94.8	95.5	97.4	98.7	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	14.8	91.0	94.8	95.5	97.4	98.7	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
0	14.8	91.0	94.8	95.5	97.4	98.7	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

AUG  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	20.0	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
≥ 20000	28.4	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 18000	28.4	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 16000	28.4	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 14000	29.0	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
≥ 12000	29.0	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 10000	31.0	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 9000	31.0	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 8000	31.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 7000	31.0	61.9	61.9	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 6000	31.0	62.6	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 5000	31.0	62.6	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 4500	31.0	62.6	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 4000	31.0	63.2	63.2	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
≥ 3500	31.0	63.2	63.9	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 3000	31.0	63.9	64.5	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 2500	31.6	65.8	66.5	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 2000	32.3	71.0	72.3	73.6	74.2	74.2	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 1800	32.3	71.0	72.3	73.6	74.2	74.2	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 1500	35.5	83.2	84.5	85.8	86.5	86.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 1200	38.1	89.7	91.0	92.3	92.9	92.9	94.2	94.2	94.2	94.2	94.2	94.2	94.8	94.8
≥ 1000	38.1	91.0	92.3	94.2	94.8	95.5	97.4	97.4	97.4	97.4	97.4	97.4	98.1	98.1
≥ 900	38.1	91.0	92.3	94.2	95.5	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.7	98.7
≥ 800	38.1	91.6	92.9	94.8	96.1	96.8	98.7	98.7	98.7	98.7	98.7	98.7	99.4	99.4
≥ 700	38.1	91.6	92.9	94.8	96.1	96.8	98.7	98.7	98.7	98.7	98.7	98.7	99.4	99.4
≥ 600	38.1	92.3	93.6	95.5	96.8	97.4	99.4	99.4	99.4	99.4	99.4	99.4	100.0	100.0
≥ 500	38.1	92.3	93.6	95.5	96.8	97.4	99.4	99.4	99.4	99.4	99.4	99.4	100.0	100.0
≥ 400	38.1	92.3	93.6	95.5	96.8	97.4	99.4	99.4	99.4	99.4	99.4	99.4	100.0	100.0
≥ 300	38.1	92.3	93.6	95.5	96.8	97.4	99.4	99.4	99.4	99.4	99.4	99.4	100.0	100.0
≥ 200	38.1	92.3	93.6	95.5	96.8	97.4	99.4	99.4	99.4	99.4	99.4	99.4	100.0	100.0
≥ 100	38.1	92.3	93.6	95.5	96.8	97.4	99.4	99.4	99.4	99.4	99.4	99.4	100.0	100.0
≥ 0	38.1	92.3	93.6	95.5	96.8	97.4	99.4	99.4	99.4	99.4	99.4	99.4	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

5703 CEILING VERSUS VISIBILITY JAN 78

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77  
YEARS

AUG  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

12  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	16.1	31.6	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 20000	21.9	47.7	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 18000	21.9	47.7	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 16000	21.9	47.7	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 14000	21.9	47.7	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 12000	22.6	49.7	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
≥ 10000	25.2	54.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 9000	25.2	54.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 8000	25.2	55.5	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
≥ 7000	25.2	56.8	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 6000	25.2	56.8	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 5000	25.8	57.4	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 4500	25.8	57.4	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 4000	25.8	57.4	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 3500	25.8	58.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 3000	25.8	59.4	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 2500	25.8	61.9	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 2000	27.7	69.7	71.0	71.6	72.3	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
≥ 1800	28.4	70.3	71.6	72.3	72.9	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 1500	38.1	87.7	89.0	90.3	91.0	91.6	91.6	92.9	92.9	92.9	93.6	93.6	93.6	93.6	93.6
≥ 1200	38.1	91.0	92.3	93.6	94.2	94.8	94.8	96.1	96.1	96.1	96.8	96.8	96.8	96.8	96.8
≥ 1000	38.7	92.3	93.6	95.5	96.1	96.8	96.8	98.1	98.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 900	38.7	92.3	93.6	95.5	96.1	96.8	96.8	98.1	98.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 800	38.7	92.3	93.6	95.5	96.1	96.8	96.8	98.1	98.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 700	38.7	92.3	93.6	95.5	96.1	96.8	96.8	98.1	98.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 600	38.7	92.9	94.2	96.1	96.8	97.4	97.4	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 500	38.7	92.9	94.2	96.1	96.8	97.4	97.4	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 400	38.7	92.9	94.2	96.1	96.8	97.4	97.4	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 300	38.7	92.9	94.2	96.1	96.8	97.4	97.4	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 200	38.7	92.9	94.2	96.1	96.8	97.4	97.4	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 100	38.7	92.9	94.2	96.1	96.8	97.4	97.4	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
0	38.7	92.9	94.2	96.1	96.8	97.4	97.4	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

AUG  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

15  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	14.8	31.0	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6
≥ 20000	25.2	54.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 18000	25.2	54.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 16000	25.2	54.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 14000	25.2	54.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 12000	25.8	55.5	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
≥ 10000	29.7	60.7	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 9000	29.7	60.7	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 8000	30.3	63.2	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 7000	30.3	63.2	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 6000	30.3	63.2	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 5000	30.3	63.9	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 4500	30.3	63.9	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 4000	30.3	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 3500	30.3	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 3000	30.3	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 2500	30.3	65.8	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 2000	31.6	71.0	72.9	73.6	74.2	74.8	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 1800	32.9	72.9	74.8	75.5	76.1	76.8	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 1500	39.4	84.5	87.7	89.7	90.3	91.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1200	39.4	87.7	91.0	93.6	94.2	94.8	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1000	39.4	89.7	92.9	95.5	96.1	96.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7
≥ 900	39.4	89.7	92.9	95.5	96.1	96.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7
≥ 800	39.4	89.7	93.6	96.1	96.8	97.4	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700	39.4	89.7	93.6	96.1	96.8	97.4	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600	39.4	89.7	93.6	96.1	96.8	97.4	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500	39.4	89.7	93.6	96.1	96.8	97.4	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	39.4	89.7	93.6	96.1	96.8	97.4	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	39.4	89.7	93.6	96.1	96.8	97.4	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	39.4	89.7	93.6	96.1	96.8	97.4	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	39.4	89.7	93.6	96.1	96.8	97.4	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4
≥ 0	39.4	89.7	93.6	96.1	96.8	97.4	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS 155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

AUG  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	12.9	27.7	28.4	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 20000	24.5	47.7	48.4	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 18000	24.5	47.7	48.4	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 16000	24.5	47.7	48.4	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 14000	24.5	48.4	49.0	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
≥ 12000	24.5	51.0	51.6	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 10000	27.7	59.4	61.3	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 9000	27.7	59.4	61.3	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 8000	27.7	62.6	64.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 7000	27.7	63.2	65.8	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 6000	27.7	63.2	65.8	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 5000	27.7	63.2	65.8	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 4500	27.7	63.2	65.8	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 4000	27.7	63.2	65.8	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 3500	27.7	63.9	66.5	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 3000	27.7	63.9	66.5	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
≥ 2500	27.7	65.8	68.4	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 2000	29.0	71.6	74.2	76.8	76.8	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 1800	29.0	71.6	74.2	76.8	76.8	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 1500	32.9	82.6	85.2	88.4	88.4	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 1200	34.2	87.7	90.3	93.6	93.6	93.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1000	34.2	90.3	92.9	96.1	96.1	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	34.2	91.0	93.6	96.8	96.8	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	34.2	91.0	94.2	97.4	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	34.2	91.0	94.2	97.4	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	34.2	91.0	94.2	97.4	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 500	34.2	91.0	94.2	97.4	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	34.2	91.0	94.2	97.4	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	34.2	91.0	94.2	97.4	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	34.2	91.0	94.2	97.4	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	34.2	91.0	94.2	97.4	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 0	34.2	91.0	94.2	97.4	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

155



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77  
YEARS

AUG  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

21  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0		
NO CEILING	7.7	40.7	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 20000	11.6	52.9	54.8	54.8	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 18000	12.3	53.6	55.5	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 16000	12.3	53.6	55.5	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 14000	12.3	53.6	55.5	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 12000	12.3	55.5	57.4	57.4	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 10000	12.9	63.2	65.8	65.8	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 9000	12.9	63.2	65.8	65.8	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 8000	12.9	65.8	68.4	68.4	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 7000	12.9	67.1	69.7	69.7	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
≥ 6000	12.9	67.1	69.7	69.7	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
≥ 5000	12.9	67.1	69.7	69.7	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
≥ 4500	12.9	67.7	70.3	70.3	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 4000	12.9	68.4	71.0	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 3500	12.9	69.0	71.6	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 3000	12.9	69.7	72.3	72.3	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
≥ 2500	12.9	72.3	74.8	74.8	75.5	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 2000	12.9	74.2	76.8	76.8	78.1	78.1	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 1800	12.9	74.2	76.8	76.8	78.1	78.1	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 1500	15.5	83.9	87.1	87.1	88.4	88.4	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 1200	16.1	86.5	89.7	89.7	91.0	91.0	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1000	16.1	92.9	96.1	96.1	97.4	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 900	16.1	92.9	96.8	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 800	16.1	92.9	96.8	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700	16.1	92.9	96.8	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600	16.1	92.9	96.8	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500	16.1	92.9	96.8	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	16.1	92.9	96.8	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	16.1	92.9	96.8	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	16.1	92.9	96.8	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	16.1	92.9	96.8	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 0	16.1	92.9	96.8	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

AUG  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	12.0	39.0	39.8	39.9	39.9	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
≥ 20000	17.2	54.6	55.7	55.7	55.8	55.9	56.0	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 18000	17.3	54.7	55.7	55.8	55.9	56.0	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 16000	17.3	54.7	55.7	55.8	55.9	56.0	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 14000	17.3	54.8	55.9	56.0	56.1	56.2	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
≥ 12000	17.6	56.1	57.2	57.3	57.3	57.4	57.5	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6
≥ 10000	19.2	61.1	62.4	62.6	62.7	62.7	62.9	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
≥ 9000	19.2	61.1	62.4	62.6	62.7	62.7	62.9	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
≥ 8000	19.3	63.6	65.0	65.2	65.3	65.4	65.6	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7
≥ 7000	19.3	64.2	65.7	66.1	66.1	66.2	66.4	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 6000	19.4	64.4	65.9	66.2	66.3	66.4	66.5	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6
≥ 5000	19.4	64.6	66.1	66.5	66.5	66.6	66.8	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9
≥ 4500	19.4	64.7	66.2	66.5	66.6	66.7	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9
≥ 4000	19.4	65.2	66.7	67.0	67.1	67.2	67.3	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
≥ 3500	19.5	65.7	67.3	67.6	67.7	67.7	67.9	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 3000	19.5	66.2	67.8	68.3	68.5	68.6	68.9	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 2500	19.6	67.9	69.8	70.4	70.7	70.8	71.2	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 2000	20.2	72.7	74.8	75.6	76.2	76.5	77.1	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 1800	20.7	73.5	75.5	76.3	76.9	77.3	77.8	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 1500	24.0	83.7	86.1	87.3	88.0	88.3	89.0	89.4	89.4	89.4	89.5	89.5	89.5	89.5	89.5
≥ 1200	24.9	87.7	90.2	91.5	92.2	92.6	93.3	93.8	93.8	93.8	93.9	93.9	93.9	94.0	94.0
≥ 1000	25.0	91.4	93.9	95.3	96.1	96.5	97.5	98.0	98.1	98.1	98.2	98.2	98.2	98.3	98.4
≥ 900	25.0	91.5	94.0	95.5	96.3	96.8	97.7	98.2	98.3	98.3	98.4	98.4	98.4	98.6	98.6
≥ 800	25.0	91.5	94.3	95.7	96.6	97.1	98.1	98.6	98.6	98.6	98.7	98.7	98.7	98.9	99.0
≥ 700	25.0	91.6	94.4	95.9	96.8	97.3	98.3	98.9	99.0	99.0	99.0	99.0	99.0	99.2	99.3
≥ 600	25.0	91.8	94.6	96.1	97.0	97.6	98.6	99.2	99.3	99.3	99.4	99.4	99.4	99.5	99.6
≥ 500	25.0	91.8	94.6	96.1	97.0	97.6	98.6	99.2	99.3	99.3	99.4	99.4	99.4	99.5	99.6
≥ 400	25.0	91.8	94.6	96.1	97.0	97.6	98.6	99.2	99.3	99.3	99.4	99.4	99.4	99.6	99.7
≥ 300	25.0	91.8	94.8	96.3	97.2	97.7	98.8	99.4	99.4	99.4	99.6	99.6	99.6	99.8	99.9
≥ 200	25.0	91.8	94.8	96.3	97.2	97.7	98.8	99.4	99.4	99.4	99.6	99.6	99.6	99.8	100.0
≥ 100	25.0	91.8	94.8	96.3	97.2	97.7	98.8	99.4	99.4	99.4	99.6	99.6	99.6	99.8	100.0
≥ 0	25.0	91.8	94.8	96.3	97.2	97.7	98.8	99.4	99.4	99.4	99.6	99.6	99.6	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS 1240



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

## CEILING VERSUS VISIBILITY

42215  
STATIONFUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

SEP  
MONTH00  
HOURS (LST)PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	≥ 0
NO CEILING	4.0	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
≥ 20000	6.0	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 18000	6.0	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 16000	6.0	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 14000	6.0	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 12000	6.0	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
≥ 10000	7.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
≥ 9000	7.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
≥ 8000	7.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 7000	7.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 6000	7.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 5000	7.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 4500	7.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 4000	7.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 3500	7.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 3000	7.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 2500	7.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 2000	7.3	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
≥ 1800	7.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 1500	8.0	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 1200	8.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 1000	8.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 900	8.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 800	8.0	94.7	95.3	96.0	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 700	8.0	94.7	95.3	96.0	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 600	8.0	95.3	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 500	8.0	95.3	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 400	8.0	95.3	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 300	8.0	95.3	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 200	8.0	95.3	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 100	8.0	95.3	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 0	8.0	95.3	96.0	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

SEP  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

03  
HOURS (L & T)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	2.7	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
≥ 20000	4.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 18000	4.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 16000	4.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 14000	4.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 12000	4.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 10000	4.7	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 9000	4.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 8000	4.7	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 7000	4.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 6000	4.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 5000	4.7	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 4500	4.7	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 4000	4.7	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 3500	4.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 3000	4.7	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 2500	4.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 2000	4.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
≥ 1800	4.7	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 1500	4.7	90.7	91.3	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 1200	4.7	92.0	92.7	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 1000	4.7	94.0	96.0	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 900	4.7	94.0	96.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 800	4.7	94.0	96.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 700	4.7	94.0	96.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 600	4.7	94.0	96.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	4.7	94.7	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	4.7	94.7	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	4.7	94.7	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	4.7	94.7	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	4.7	94.7	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
0	4.7	94.7	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

SEP  
MONTH

06  
HOURS (L.S.T.)

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	2.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7
≥ 20000	5.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 18000	5.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 16000	5.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 14000	5.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 12000	6.0	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 10000	6.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 9000	6.7	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 8000	7.3	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 7000	7.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 6000	7.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 5000	7.3	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 4500	7.3	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 4000	7.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 3500	7.3	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 3000	7.3	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
≥ 2500	7.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 2000	7.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 1800	7.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 1500	7.3	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 1200	7.3	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 1000	7.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 900	7.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 800	7.3	96.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 700	7.3	96.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 600	7.3	96.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	7.3	96.7	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	7.3	96.7	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	7.3	96.7	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	7.3	96.7	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	7.3	96.7	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 0	7.3	96.7	98.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

SEP  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	13.3	38.0	38.7	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
≥ 20000	19.3	52.0	52.7	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
≥ 18000	19.3	52.0	52.7	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
≥ 16000	19.3	52.0	52.7	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
≥ 14000	19.3	52.7	53.3	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 12000	20.0	53.3	54.0	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 10000	23.3	60.7	61.3	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 9000	23.3	60.7	61.3	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 8000	25.3	70.0	70.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 7000	26.0	71.3	72.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 6000	26.0	71.3	72.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 5000	26.0	71.3	72.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 4500	26.0	71.3	72.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 4000	26.0	74.0	74.7	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
≥ 3500	26.0	74.0	74.7	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
≥ 3000	26.7	76.0	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 2500	26.7	77.3	78.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 2000	28.0	83.3	84.0	84.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
≥ 1800	28.0	83.3	84.0	84.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
≥ 1500	29.3	92.7	93.3	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 1200	29.3	92.7	93.3	94.0	94.7	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 1000	29.3	96.0	96.7	97.3	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 900	29.3	96.0	96.7	97.3	98.0	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 800	29.3	96.7	97.3	98.0	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	29.3	96.7	97.3	98.0	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	29.3	96.7	97.3	98.0	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	29.3	96.7	97.3	98.0	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	29.3	96.7	97.3	98.0	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	29.3	96.7	97.3	98.0	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	29.3	96.7	97.3	98.0	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	29.3	96.7	97.3	98.0	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	29.3	96.7	97.3	98.0	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215 STATION FUTEHA, OKINAWA 73-77 YEARS SEP NORTH 12 HOURS (L.S.T.)

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	≥ 0
NO CEILING	12.7	33.3	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
≥ 20000	22.7	50.0	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 18000	22.7	50.0	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 16000	22.7	50.0	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 14000	22.7	50.0	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 12000	23.3	52.0	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
≥ 10000	24.7	58.0	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 9000	24.7	59.3	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 8000	27.3	66.7	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 7000	27.3	66.7	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 6000	27.3	66.7	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 5000	27.3	67.3	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 4500	27.3	67.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 4000	27.3	67.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 3500	29.3	70.0	72.0	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
≥ 3000	29.3	71.3	73.3	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
≥ 2500	30.7	74.0	76.7	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 2000	31.3	75.3	78.0	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 1800	33.3	86.0	88.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
≥ 1600	33.3	87.3	90.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 1400	33.3	89.3	92.7	95.3	95.3	95.3	95.3	95.3	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 1200	33.3	89.3	92.7	95.3	96.0	96.0	96.0	96.0	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 1000	33.3	89.3	92.7	95.3	96.7	96.7	96.7	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 900	33.3	89.3	92.7	95.3	96.7	96.7	96.7	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 800	33.3	89.3	92.7	95.3	96.7	96.7	96.7	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 700	33.3	89.3	92.7	95.3	96.7	96.7	96.7	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 600	33.3	89.3	92.7	95.3	96.7	96.7	96.7	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 500	33.3	90.0	93.3	96.0	97.3	97.3	97.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 400	33.3	90.0	93.3	96.0	97.3	97.3	97.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 300	33.3	90.0	93.3	96.0	97.3	97.3	97.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 200	33.3	90.0	93.3	96.0	97.3	97.3	97.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 100	33.3	90.0	93.3	96.0	97.3	97.3	97.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 0	33.3	90.0	93.3	96.0	97.3	97.3	97.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0

TOTAL NUMBER OF OBSERVATIONS 150

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

## CEILING VERSUS VISIBILITY

42215  
STATIONFUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

SEP  
MONTHPERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)15  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	≥ 0
NO CEILING	11.3	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7
≥ 20000	24.0	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 18000	24.0	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 16000	24.0	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 14000	24.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
≥ 12000	24.7	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 10000	26.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 9000	26.7	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
≥ 8000	29.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 7000	29.3	72.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 6000	29.3	72.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 5000	30.0	72.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 4500	30.0	72.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 4000	30.0	72.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 3500	30.0	72.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 3000	30.0	74.0	75.3	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 2500	31.3	77.3	78.7	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 2000	32.0	80.7	82.0	83.3	83.3	83.3	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 1800	32.0	81.3	82.7	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 1500	33.3	89.3	91.3	93.3	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 1200	33.3	90.7	92.7	94.7	94.7	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 1000	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 900	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 800	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 700	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 600	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 500	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 400	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 300	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 200	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 100	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
0	33.3	92.7	94.7	96.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0

TOTAL NUMBER OF OBSERVATIONS

150



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

72-77

YEARS

SEP  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	9.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 20000	18.7	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
≥ 18000	19.3	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7
≥ 16000	19.3	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7
≥ 14000	19.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
≥ 12000	19.3	52.0	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 10000	24.0	61.3	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 9000	24.0	62.7	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
≥ 8000	26.7	72.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
≥ 7000	26.7	73.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
≥ 6000	26.7	73.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
≥ 5000	26.7	73.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
≥ 4500	26.7	73.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
≥ 4000	26.7	74.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 3500	26.7	76.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 3000	26.7	78.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 2500	26.7	80.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 2000	27.3	84.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 1800	27.3	84.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 1500	28.7	92.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 1200	28.7	93.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 1000	28.7	93.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 900	28.7	93.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 800	28.7	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 700	28.7	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 600	28.7	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 500	28.7	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 400	28.7	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 300	28.7	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 200	28.7	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 100	28.7	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
0	28.7	94.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

SEP  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

21  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														≥ 10
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	6.7	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
≥ 20000	10.7	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 18000	10.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 16000	10.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 14000	10.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 12000	10.7	61.3	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 10000	10.7	67.3	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 9000	10.7	66.7	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 8000	11.3	79.3	80.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 7000	11.3	80.0	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 6000	11.3	80.0	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 5000	11.3	80.0	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 4500	11.3	80.0	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 4000	11.3	80.7	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 3500	11.3	81.3	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
≥ 3000	11.3	82.0	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 2500	11.3	85.3	86.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
≥ 2000	11.3	88.0	88.7	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
≥ 1800	11.3	88.7	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 1500	11.3	94.0	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 1200	11.3	94.0	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 1000	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 900	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 800	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 700	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 600	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 500	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 400	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 300	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 200	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 100	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 0	11.3	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0

TOTAL NUMBER OF OBSERVATIONS

150

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

SEP  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0		
NO CEILING	7.8	42.6	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8		
≥ 20000	13.9	56.0	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3		
≥ 18000	14.0	56.2	56.4	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5		
≥ 16000	14.0	56.2	56.4	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5		
≥ 14000	14.0	56.4	56.7	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8		
≥ 12000	14.3	58.4	58.8	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9		
≥ 10000	16.0	65.3	65.8	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9		
≥ 9000	16.0	66.5	67.0	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1		
≥ 8000	17.4	74.6	75.2	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3		
≥ 7000	17.5	75.2	75.8	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0		
≥ 6000	17.5	75.2	75.8	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0		
≥ 5000	17.6	75.5	76.3	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4		
≥ 4500	17.6	75.6	76.3	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5		
≥ 4000	17.6	76.2	77.0	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2		
≥ 3500	17.6	76.7	77.5	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7		
≥ 3000	17.9	78.1	78.9	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3		
≥ 2500	18.1	80.1	80.9	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4		
≥ 2000	18.6	83.8	84.7	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3		
≥ 1800	18.7	84.3	85.2	85.8	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9		
≥ 1500	19.4	91.0	92.3	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3		
≥ 1200	19.5	92.1	93.4	94.3	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6		
≥ 1000	19.5	93.9	95.6	96.8	96.9	97.1	97.3	97.4	97.5	97.5	97.5	97.5	97.5	97.5		
≥ 900	19.5	93.9	95.7	96.8	97.2	97.3	97.6	97.7	97.8	97.8	97.8	97.8	97.8	97.8		
≥ 800	19.5	94.3	96.0	97.2	97.6	97.8	98.0	98.3	98.3	98.3	98.3	98.3	98.3	98.3		
≥ 700	19.5	94.3	96.0	97.2	97.6	97.8	98.0	98.3	98.3	98.3	98.3	98.3	98.3	98.3		
≥ 600	19.5	94.3	96.1	97.3	97.7	97.8	98.1	98.3	98.3	98.3	98.3	98.3	98.3	98.3		
≥ 500	19.5	94.5	96.3	97.5	97.9	98.1	98.3	98.7	98.9	98.9	98.9	98.9	98.9	98.9		
≥ 400	19.5	94.5	96.3	97.5	98.0	98.2	98.4	98.8	98.8	98.8	98.8	98.8	98.8	98.8		
≥ 300	19.5	94.5	96.3	97.5	98.0	98.2	98.4	98.8	98.8	98.8	98.8	98.8	98.8	98.8		
≥ 200	19.5	94.5	96.3	97.7	98.2	98.3	98.6	98.9	98.9	98.9	98.9	98.9	98.9	98.9		
≥ 100	19.5	94.5	96.3	97.7	98.2	98.3	98.6	98.9	98.9	98.9	98.9	98.9	98.9	98.9		
≥ 0	19.5	94.5	96.3	97.7	98.2	98.3	98.6	98.9	98.9	98.9	98.9	98.9	98.9	98.9		

TOTAL NUMBER OF OBSERVATIONS 1200

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

OCT  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

00  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	3.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 20000	3.2	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 18000	3.2	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 16000	3.2	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 14000	3.2	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 12000	3.2	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 10000	3.2	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 9000	3.2	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 8000	3.9	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 7000	3.9	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 6000	3.9	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 5000	4.5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 4500	4.5	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 4000	4.5	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 3500	4.5	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
≥ 3000	4.5	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 2500	4.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 2000	4.5	89.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 1800	4.5	89.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 1500	4.5	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1200	4.5	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1000	4.5	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 900	4.5	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 800	4.5	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700	4.5	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	4.5	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	4.5	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	4.5	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	4.5	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	4.5	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	4.5	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	4.5	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

# CEILING VERSUS VISIBILITY

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

UCT  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

03  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	2.6	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 20000	3.2	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 18000	3.2	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 16000	3.2	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 14000	3.2	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 12000	3.2	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 10000	3.2	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 9000	3.2	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 8000	3.2	79.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 7000	3.2	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 6000	3.2	81.3	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 5000	3.2	81.3	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 4500	3.2	81.3	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 4000	3.2	82.6	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 3500	3.2	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 3000	3.2	85.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 2500	3.2	87.7	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 2000	3.2	91.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1800	3.2	91.0	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1500	3.2	95.5	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1200	3.2	96.1	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 1000	3.2	96.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 900	3.2	97.4	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 800	3.2	97.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	3.2	97.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	3.2	97.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	3.2	97.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	3.2	97.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	3.2	97.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	3.2	97.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	3.2	97.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	3.2	97.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEHA, OKINAWA  
STATION NAME

73-77

YEARS

OCT  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	2.6	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1
≥ 20000	2.6	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 18000	2.6	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 16000	2.6	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 14000	2.6	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 12000	2.6	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 10000	2.6	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 9000	2.6	62.6	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 8000	2.6	71.6	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
≥ 7000	3.2	74.8	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 6000	3.2	75.5	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 5000	3.2	76.8	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 4500	3.2	77.4	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 4000	3.2	77.4	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 3500	3.2	78.1	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 3000	3.2	82.6	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 2500	3.2	85.2	87.1	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 2000	3.2	89.0	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 1800	3.2	89.0	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 1500	3.2	93.6	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1200	3.2	94.2	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1000	3.2	94.8	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	3.2	94.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	3.2	94.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	3.2	95.5	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 600	3.2	95.5	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	3.2	96.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	3.2	96.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	3.2	96.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	3.2	96.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	3.2	96.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 0	3.2	96.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

155

TOTAL NUMBER OF OBSERVATIONS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

0000  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 0
NO CEILING	14.2	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
≥ 20000	19.4	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 18000	19.4	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 16000	19.4	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 14000	19.4	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 12000	20.7	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 10000	25.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 9000	25.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
≥ 8000	27.7	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 7000	28.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 6000	28.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 5000	28.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 4500	28.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 4000	28.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 3500	29.0	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 3000	31.0	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 2500	31.0	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 2000	31.6	88.4	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 1800	31.6	89.0	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 1500	31.6	92.3	92.9	94.2	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1200	31.6	92.3	93.6	94.2	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1000	31.6	92.9	94.2	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 900	31.6	92.9	94.2	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	31.6	92.9	94.2	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 700	31.6	92.9	94.2	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 600	31.6	93.6	94.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500	31.6	93.6	94.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	31.6	93.6	94.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	31.6	93.6	94.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	31.6	93.6	94.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	31.6	93.6	94.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
0	31.6	93.6	94.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

OCT  
MONTH

12

HOURS (LST)

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	14.8	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 20000	20.0	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 18000	20.0	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 16000	20.0	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 14000	20.0	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 12000	22.6	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
≥ 10000	27.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 9000	27.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 8000	29.0	64.5	64.5	64.5	64.5	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 7000	29.0	65.2	65.2	65.2	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 6000	29.0	65.8	65.8	65.8	65.8	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 5000	29.0	65.8	65.8	65.8	65.8	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 4500	29.0	65.8	65.8	65.8	65.8	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
≥ 4000	30.3	69.7	69.7	69.7	69.7	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
≥ 3500	31.0	71.6	71.6	71.6	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 3000	31.6	73.6	73.6	73.6	73.6	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 2500	34.2	80.7	80.7	80.7	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 2000	35.5	85.8	86.5	86.5	86.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 1800	35.5	86.5	87.1	87.1	87.1	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 1500	36.1	93.6	95.5	96.1	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 1200	36.1	93.6	95.5	96.1	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 1000	36.1	93.6	95.5	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 900	36.1	93.6	95.5	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	36.1	93.6	95.5	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	36.1	93.6	95.5	96.8	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600	36.1	93.6	95.5	96.8	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500	36.1	93.6	95.5	96.8	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	36.1	93.6	95.5	96.8	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	36.1	93.6	95.5	96.8	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	36.1	93.6	95.5	96.8	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	36.1	93.6	95.5	96.8	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	36.1	93.6	95.5	96.8	98.7	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

## CEILING VERSUS VISIBILITY

42215

FUTEMA, OKINAWA

73-77

OCT

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)15  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	11.6	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 20000	13.6	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 18000	13.6	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 16000	13.6	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
≥ 14000	13.6	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 12000	14.2	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 10000	21.9	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 9000	21.9	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
≥ 8000	25.2	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 7000	25.8	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 6000	25.8	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 5000	25.8	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 4500	26.5	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 4000	27.1	64.5	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 3500	27.1	65.2	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 3000	29.0	69.0	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 2500	31.6	75.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 2000	33.6	83.9	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 1800	34.2	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 1500	34.2	92.9	93.6	93.6	94.2	94.2	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 1200	34.2	94.2	94.8	95.5	96.1	96.1	96.1	96.8	96.8	97.4	97.4	97.4	97.4	97.4
≥ 1000	34.2	94.8	96.1	96.8	97.4	97.4	98.1	98.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 900	34.2	94.8	96.1	96.8	97.4	97.4	98.1	98.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 800	34.2	94.8	96.1	96.8	97.4	97.4	98.1	98.1	98.1	98.7	98.7	98.7	98.7	98.7
≥ 700	34.2	94.8	96.1	96.8	98.1	98.1	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 600	34.2	94.8	96.1	96.8	98.1	98.1	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 500	34.2	94.8	96.1	96.8	98.1	98.1	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 400	34.2	94.8	96.1	96.8	98.1	98.1	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 300	34.2	94.8	96.1	96.8	98.1	98.1	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 200	34.2	94.8	96.1	96.8	98.1	98.1	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 100	34.2	94.8	96.1	96.8	98.1	98.1	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4
≥ 0	34.2	94.8	96.1	96.8	98.1	98.1	98.7	98.7	98.7	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

OCT  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (L S T)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	10.3	32.3	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 20000	13.6	42.6	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
≥ 18000	13.6	42.6	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
≥ 16000	13.6	42.6	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
≥ 14000	13.6	42.6	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
≥ 12000	13.6	43.9	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
≥ 10000	18.1	56.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 9000	18.1	56.8	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 8000	21.3	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 7000	21.9	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 6000	21.9	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 5000	22.6	72.9	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 4500	22.6	72.9	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 4000	23.2	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 3500	23.9	76.1	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 3000	24.5	80.7	81.3	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 2500	24.5	83.9	84.5	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 2000	25.8	85.8	86.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 1800	25.8	85.8	86.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 1500	25.8	91.6	92.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 1200	25.8	92.9	93.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 1000	25.8	94.8	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 900	25.8	95.5	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 800	25.8	95.5	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 700	25.8	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	25.8	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 500	25.8	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	25.8	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 300	25.8	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 200	25.8	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 100	25.8	96.1	96.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 0	25.8	95.1	96.8	96.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1

TOTAL NUMBER OF OBSERVATIONS

135

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTERA, OKINAWA  
STATION NAME

73-77

YEARS

OCT  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

21  
HOURS (L & T)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	¾	½	¼	≥ 0
NO CEILING	3.2	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 20000	3.2	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 18000	3.2	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 16000	3.2	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 14000	3.2	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 12000	3.2	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 10000	3.2	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 9000	3.2	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 8000	3.9	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 7000	3.9	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 6000	3.9	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 5000	4.5	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 4500	4.5	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 4000	4.5	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 3500	4.5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 3000	4.5	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 2500	4.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 2000	4.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 1800	4.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 1500	4.5	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1200	4.5	92.9	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1000	4.5	92.9	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 900	4.5	92.9	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 800	4.5	93.6	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 700	4.5	94.2	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 600	4.5	94.2	96.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 500	4.5	95.5	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	4.5	95.5	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	4.5	95.5	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	4.5	95.5	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	4.5	95.5	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
0	4.5	95.5	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

DCT  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	7.8	41.2	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 20000	9.8	50.3	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4
≥ 18000	9.8	50.3	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4
≥ 16000	9.8	50.3	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4
≥ 14000	9.8	50.4	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
≥ 12000	10.4	52.4	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6
≥ 10000	13.2	60.2	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
≥ 9000	13.2	60.2	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4
≥ 8000	14.6	72.0	72.3	72.3	72.3	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4
≥ 7000	14.9	73.3	73.6	73.6	73.6	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
≥ 6000	14.9	73.6	73.9	73.9	73.9	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 5000	15.2	74.1	74.4	74.4	74.4	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
≥ 4500	15.2	74.4	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 4000	15.6	76.3	76.7	76.7	76.7	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 3500	15.8	77.3	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
≥ 3000	16.5	80.7	81.1	81.1	81.1	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
≥ 2500	17.1	84.2	84.7	84.9	84.9	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
≥ 2000	17.7	87.7	88.3	88.7	88.7	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8
≥ 1800	17.8	87.9	88.6	89.0	89.0	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1
≥ 1500	17.9	93.2	94.2	94.8	95.0	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 1200	17.9	94.0	95.2	95.8	96.1	96.2	96.3	96.3	96.3	96.4	96.4	96.4	96.4
≥ 1000	17.9	94.9	96.2	97.2	97.4	97.6	97.7	97.7	97.7	97.8	97.8	97.8	97.8
≥ 900	17.9	95.1	96.5	97.5	97.7	97.9	98.0	98.1	98.1	98.2	98.2	98.2	98.2
≥ 800	17.9	95.2	96.7	97.8	98.1	98.2	98.3	98.4	98.4	98.5	98.6	98.6	98.6
≥ 700	17.9	95.5	97.0	98.2	98.6	98.6	98.9	99.0	99.0	99.1	99.2	99.2	99.2
≥ 600	17.9	95.6	97.1	98.2	98.7	98.9	99.0	99.1	99.1	99.2	99.3	99.4	99.4
≥ 500	17.9	95.8	97.4	98.6	99.0	99.2	99.3	99.6	99.6	99.7	99.8	99.8	99.9
≥ 400	17.9	95.8	97.4	98.6	99.0	99.2	99.3	99.6	99.6	99.7	99.8	99.8	99.9
≥ 300	17.9	95.8	97.4	98.6	99.0	99.2	99.3	99.6	99.6	99.7	99.8	99.8	99.9
≥ 200	17.9	95.8	97.4	98.6	99.0	99.2	99.3	99.6	99.6	99.7	99.8	99.8	99.9
≥ 100	17.9	95.8	97.4	98.6	99.0	99.2	99.3	99.6	99.6	99.7	99.8	99.8	99.9
≥ 0	17.9	95.8	97.4	98.6	99.0	99.2	99.3	99.6	99.6	99.7	99.8	99.8	99.9

TOTAL NUMBER OF OBSERVATIONS

1240

DIRNAVOCEANMET SMOS



NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

## CEILING VERSUS VISIBILITY

42215  
STATIONFUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

NOV  
MONTH00  
HOURS (L.S.T.)PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	2.7	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
≥ 20000	2.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
≥ 18000	2.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
≥ 16000	2.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
≥ 14000	2.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
≥ 12000	2.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
≥ 10000	2.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
≥ 9000	2.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
≥ 8000	2.7	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 7000	2.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
≥ 6000	2.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 5000	2.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 4500	2.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 4000	2.7	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 3500	2.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 3000	2.7	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 2500	2.7	87.3	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
≥ 2000	2.7	92.7	93.3	93.3	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 1800	2.7	92.7	93.3	93.3	93.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 1500	2.7	95.3	96.0	96.0	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 1200	2.7	95.3	96.0	96.0	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 1000	2.7	95.3	96.0	96.0	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 900	2.7	96.0	96.7	96.7	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 800	2.7	98.7	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	2.7	98.7	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	2.7	98.7	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	2.7	98.7	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	2.7	98.7	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	2.7	98.7	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	2.7	98.7	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	2.7	98.7	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	2.7	98.7	99.3	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

NDV  
MONTH

03  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	2.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
≥ 20000	2.7	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 18000	2.7	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 16000	2.7	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 14000	2.7	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 12000	2.7	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0
≥ 10000	2.7	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 9000	2.7	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 8000	2.7	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 7000	2.7	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 6000	2.7	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
≥ 5000	2.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 4500	2.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 4000	2.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 3500	2.7	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 3000	2.7	81.3	81.3	81.3	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 2500	2.7	85.3	85.3	85.3	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 2000	2.7	92.0	92.7	92.7	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 1800	2.7	92.0	92.7	92.7	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 1500	2.7	95.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 1200	2.7	95.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 1000	2.7	95.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 900	2.7	95.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 800	2.7	96.7	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 700	2.7	96.7	98.7	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 600	2.7	96.7	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	2.7	96.7	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	2.7	96.7	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	2.7	96.7	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	2.7	96.7	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	2.7	96.7	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	2.7	96.7	99.3	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 150

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

NOV  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	2.0	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
≥ 20000	2.0	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
≥ 18000	2.0	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
≥ 16000	2.0	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
≥ 14000	2.0	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
≥ 12000	2.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
≥ 10000	2.0	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 9000	2.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
≥ 8000	2.0	58.0	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 7000	2.0	69.3	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
≥ 6000	2.0	70.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
≥ 5000	2.0	71.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 4500	2.0	72.0	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 4000	2.0	73.3	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 3500	2.0	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 3000	2.0	84.0	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
≥ 2500	2.0	86.0	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
≥ 2000	2.0	90.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 1800	2.0	90.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 1500	2.0	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 1200	2.0	96.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 1000	2.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 900	2.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 800	2.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 700	2.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 600	2.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 500	2.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	2.0	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	2.0	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	2.0	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	2.0	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	2.0	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

NOV  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

09  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)											
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½
NO CEILING	14.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 20000	14.0	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
≥ 18000	14.0	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
≥ 16000	14.0	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
≥ 14000	14.0	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
≥ 12000	14.7	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
≥ 10000	18.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
≥ 9000	18.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7
≥ 8000	24.7	64.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 7000	26.7	68.7	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 6000	26.7	69.3	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
≥ 5000	27.3	71.3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 4500	28.0	72.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
≥ 4000	29.3	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 3500	30.0	77.3	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 3000	30.0	81.3	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
≥ 2500	30.7	84.7	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 2000	31.3	92.0	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 1800	31.3	92.0	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 1500	31.3	94.7	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 1200	31.3	95.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 1000	31.3	96.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 900	31.3	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 800	31.3	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	31.3	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	31.3	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	31.3	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	31.3	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	31.3	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	31.3	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	31.3	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	31.3	98.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

42215

STATION NAME  
FUTEMA, OKINAWA

73-77

STATION NAME

YEARS

NOV

MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE

(FROM HOURLY OBSERVATIONS)

12

HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	12.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
≥ 20000	15.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 18000	15.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 16000	15.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 14000	15.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
≥ 12000	16.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
≥ 10000	20.0	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
≥ 9000	20.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 8000	23.3	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
≥ 7000	24.0	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 6000	24.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 5000	24.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 4500	26.7	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
≥ 4000	27.3	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 3500	28.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
≥ 3000	30.0	75.3	75.3	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 2500	32.7	81.3	81.3	82.7	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 2000	34.0	88.0	88.0	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 1800	34.0	88.0	88.0	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 1500	34.0	93.3	93.3	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 1200	34.0	93.3	94.0	95.3	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 1000	34.0	94.7	95.3	96.7	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 900	34.0	94.7	96.7	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 800	34.0	95.3	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 700	34.0	95.3	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 600	34.0	95.3	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 500	34.0	95.3	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	34.0	95.3	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	34.0	95.3	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	34.0	95.3	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	34.0	95.3	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
0	34.0	95.3	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS

150

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

NOV  
MONTH

15  
HOURS (LST)

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	14.0	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
≥ 20000	16.0	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
≥ 18000	16.0	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
≥ 16000	16.0	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
≥ 14000	16.0	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
≥ 12000	17.3	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
≥ 10000	21.3	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
≥ 9000	21.3	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0
≥ 8000	24.0	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
≥ 7000	24.7	58.7	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 6000	24.7	59.3	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 5000	26.0	62.7	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
≥ 4500	26.0	62.7	63.3	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
≥ 4000	26.7	66.7	67.3	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 3500	27.3	69.3	70.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
≥ 3000	30.0	76.0	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 2500	32.7	80.7	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
≥ 2000	34.0	86.7	88.0	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 1800	34.0	86.7	88.0	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 1500	34.7	92.7	94.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 1200	34.7	92.7	94.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 1000	34.7	94.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 900	34.7	94.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 800	34.7	94.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 700	34.7	94.7	96.7	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 600	34.7	96.0	98.0	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 500	34.7	96.0	98.0	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	34.7	96.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	34.7	96.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	34.7	96.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	34.7	96.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	34.7	96.7	98.7	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

150



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

NOV  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)										
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ 5/16
NO CEILING	7.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3
≥ 20000	7.3	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
≥ 18000	7.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
≥ 16000	7.3	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
≥ 14000	7.3	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
≥ 12000	8.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0
≥ 10000	9.3	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
≥ 9000	9.3	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 8000	11.3	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
≥ 7000	11.3	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 6000	11.3	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7
≥ 5000	12.0	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 4500	12.7	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
≥ 4000	12.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 3500	12.7	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
≥ 3000	13.3	80.7	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 2500	13.3	82.0	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
≥ 2000	13.3	86.7	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 1800	13.3	86.7	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 1500	13.3	89.3	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 1200	13.3	90.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 1000	13.3	92.7	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 900	13.3	92.7	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 800	13.3	94.7	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 700	13.3	94.7	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 600	13.3	94.7	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 500	13.3	94.7	96.0	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 400	13.3	96.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	13.3	96.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 200	13.3	96.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 100	13.3	96.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3
0	13.3	96.0	97.3	98.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3

TOTAL NUMBER OF OBSERVATIONS 150



# CEILING VERSUS VISIBILITY

5703 CEILING VERSUS VISIBILITY JAN 78

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

NOV  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

21  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	4.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
≥ 20000	4.7	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
≥ 18000	4.7	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
≥ 16000	4.7	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
≥ 14000	4.7	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
≥ 12000	4.7	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
≥ 10000	4.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
≥ 9000	4.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
≥ 8000	4.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
≥ 7000	4.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 6000	4.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 5000	4.7	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 4500	4.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 4000	4.7	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 3500	4.7	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 3000	4.7	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 2500	4.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 2000	4.7	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 1800	4.7	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 1500	4.7	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
≥ 1200	4.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 1000	4.7	93.3	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 900	4.7	94.0	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 800	4.7	95.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 700	4.7	95.3	97.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 600	4.7	96.0	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	4.7	96.0	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	4.7	96.0	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	4.7	96.0	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	4.7	96.0	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	4.7	96.0	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 0	4.7	96.0	98.0	98.0	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

150

TOTAL NUMBER OF OBSERVATIONS

DIRNAVOCEANMET SMOS

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEM4, OKINAWA  
STATION NAME

73-77

YEARS

NOV  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	7.4	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
≥ 20000	8.1	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7
≥ 18000	8.1	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
≥ 16000	8.1	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
≥ 14000	8.1	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
≥ 12000	8.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
≥ 10000	10.1	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
≥ 9000	10.2	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
≥ 8000	11.9	61.8	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 7000	12.3	64.8	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
≥ 6000	12.3	65.3	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5
≥ 5000	12.8	67.3	67.5	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
≥ 4500	13.2	68.6	68.8	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
≥ 4000	13.5	72.3	72.5	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
≥ 3500	13.8	74.6	74.8	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
≥ 3000	14.4	80.3	80.8	80.9	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0
≥ 2500	15.2	83.5	84.1	84.3	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
≥ 2000	15.6	89.5	90.3	90.5	90.8	90.8	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
≥ 1800	15.6	89.5	90.3	90.5	90.8	90.8	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
≥ 1500	15.7	93.5	94.4	94.8	95.1	95.1	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 1200	15.7	93.9	95.1	95.5	95.8	95.8	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 1000	15.7	95.0	96.3	96.8	97.2	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 900	15.7	95.3	96.8	97.3	97.6	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 800	15.7	96.3	97.9	98.6	99.0	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 700	15.7	96.3	97.9	98.6	99.0	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 600	15.7	96.6	98.3	98.9	99.3	99.3	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 500	15.7	96.6	98.3	98.9	99.3	99.3	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 400	15.7	96.9	98.6	99.3	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	15.7	96.9	98.6	99.3	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	15.7	96.9	98.6	99.3	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	15.7	96.9	98.6	99.3	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	15.7	96.9	98.6	99.3	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

1200

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

DEC  
MONTH

00  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16
NO CEILING	3.9	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 20000	3.9	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 18000	3.9	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 16000	3.9	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 14000	3.9	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 12000	3.9	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 10000	3.9	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 9000	3.9	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 8000	3.9	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
≥ 7000	3.9	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
≥ 6000	3.9	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 5000	3.9	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 4500	3.9	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
≥ 4000	3.9	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 3500	3.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
≥ 3000	3.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 2500	3.9	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 2000	3.9	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1800	3.9	94.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1500	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	3.9	98.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

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# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

DEC  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

03  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	3.9	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
≥ 20000	3.9	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 18000	3.9	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 16000	3.9	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 14000	3.9	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 12000	3.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 10000	3.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 9000	3.9	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 8000	4.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 7000	4.5	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 6000	4.5	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 5000	4.5	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 4500	4.5	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 4000	4.5	73.6	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 3500	5.2	76.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 3000	5.2	82.6	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 2500	5.2	86.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 2000	5.2	92.9	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1800	5.2	93.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 1500	5.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1200	5.2	95.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1000	5.2	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 900	5.2	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 800	5.2	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 700	5.2	97.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600	5.2	97.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500	5.2	97.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	5.2	97.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	5.2	97.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	5.2	97.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	5.2	97.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
0	5.2	97.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

DEC  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

06  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ ¼	≥ 0	≥ 0
NO CEILING	3.2	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 20000	3.2	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 18000	3.2	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 16000	3.2	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 14000	3.2	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 12000	3.2	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 10000	3.2	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 9000	3.2	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
≥ 8000	3.2	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 7000	3.2	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 6000	3.2	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 5000	3.2	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 4500	3.2	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 4000	3.9	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 3500	4.5	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 3000	5.8	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 2500	5.8	90.3	90.3	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 2000	5.8	93.6	94.2	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 1800	5.8	94.2	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1500	5.8	94.8	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1200	5.8	94.8	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 1000	5.8	96.1	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	5.8	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	5.8	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	5.8	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	5.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	5.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	5.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	5.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	5.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	5.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
0	5.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

135



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215 STATION NAME FUTEHA, OKINAWA 73-77 YEARS DEC MONTH 09 HOURS (LST) 09

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	11.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 20000	11.0	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 18000	11.0	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 16000	11.0	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 14000	11.0	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
≥ 12000	11.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
≥ 10000	12.9	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 9000	12.9	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
≥ 8000	16.8	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 7000	17.4	55.5	55.5	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 6000	17.4	56.1	56.1	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
≥ 5000	19.4	61.3	61.3	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 4500	19.4	63.2	63.2	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
≥ 4000	20.0	68.4	68.4	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 3500	20.7	71.0	71.0	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 3000	21.9	78.7	78.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 2500	22.6	85.8	86.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 2000	22.6	91.6	92.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1800	22.6	91.6	92.9	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 1500	22.6	95.5	96.8	97.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 1200	22.6	95.5	97.4	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 1000	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	22.6	96.1	98.1	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 155



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

DEC  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

12  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	12.3	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
≥ 20000	12.9	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
≥ 18000	12.9	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
≥ 16000	12.9	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
≥ 14000	12.9	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
≥ 12000	12.9	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 10000	12.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 9000	12.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
≥ 8000	17.4	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 7000	18.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 6000	18.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
≥ 5000	20.0	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 4500	20.0	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 4000	21.3	59.4	59.4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 3500	22.6	63.2	63.2	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
≥ 3000	26.5	73.6	73.6	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
≥ 2500	27.1	80.7	80.7	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 2000	27.7	87.1	88.4	89.7	89.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 1800	27.7	87.1	88.4	89.7	89.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 1500	28.4	93.6	94.8	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1200	28.4	94.2	95.5	96.8	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 1000	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 900	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 800	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 0	28.4	95.5	96.8	98.1	98.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

## CEILING VERSUS VISIBILITY

42215  
STATIONFUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

DEC  
MONTH15  
HOURS (L.S.T.)PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	10.3	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 20000	10.3	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 18000	10.3	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 16000	10.3	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 14000	10.3	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
≥ 12000	10.3	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 10000	13.6	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 9000	13.6	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 8000	18.1	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 7000	18.7	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 6000	18.7	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 5000	19.4	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
≥ 4500	20.0	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 4000	23.2	61.3	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 3500	24.5	65.8	67.1	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
≥ 3000	26.5	73.6	74.8	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 2500	29.0	83.2	84.5	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 2000	29.7	87.7	89.0	91.0	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 1800	29.7	88.4	89.7	91.6	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1500	31.0	92.9	94.2	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1200	31.0	93.6	94.8	96.8	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 1000	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 900	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 800	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 700	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 600	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 400	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 200	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 100	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 0	31.0	93.6	95.5	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET

SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

DEC  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

18  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)													
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 5/16	≥ ¼
NO CEILING	7.7	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
≥ 20000	7.7	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 18000	7.7	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 16000	7.7	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 14000	7.7	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
≥ 12000	7.7	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
≥ 10000	8.4	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6
≥ 9000	9.0	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
≥ 8000	11.0	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
≥ 7000	11.0	43.9	44.5	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
≥ 6000	11.0	44.5	45.2	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
≥ 5000	11.6	50.3	51.0	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 4500	11.6	51.6	52.3	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
≥ 4000	12.3	54.8	56.1	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
≥ 3500	13.0	59.4	60.7	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 3000	14.8	70.3	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 2500	16.1	80.0	81.3	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 2000	16.1	87.7	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 1800	16.1	87.7	89.0	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 1500	16.8	90.3	91.6	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1200	16.8	90.3	92.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1000	16.8	92.3	94.8	95.5	95.5	95.5	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 900	16.8	92.9	95.5	96.1	96.1	96.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 800	16.8	93.6	96.1	96.8	96.8	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	16.8	93.6	96.1	96.8	97.4	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 600	16.8	93.6	96.1	96.8	98.1	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	16.8	93.6	96.1	96.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	16.8	93.6	96.1	96.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	16.8	93.6	96.1	96.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	16.8	93.6	96.1	96.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100	16.8	93.6	96.1	96.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 0	16.8	93.6	96.1	96.8	98.1	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

155

DIRNAVOCEANMET SMOS



# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

DEC  
MONTH

21  
HOURS (L.S.T.)

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	1.9	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 20000	2.6	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 18000	2.6	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 16000	2.6	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 14000	2.6	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
≥ 12000	2.6	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
≥ 10000	2.6	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 9000	2.6	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 8000	3.2	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
≥ 7000	3.2	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 6000	3.2	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 5000	3.2	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
≥ 4500	3.2	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 4000	3.2	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 3500	3.2	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 3000	3.2	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 2500	3.2	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 2000	3.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1800	3.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1500	3.2	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1200	3.2	94.8	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1000	3.2	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 900	3.2	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	3.2	96.8	97.4	97.4	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	3.2	97.4	98.7	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600	3.2	97.4	98.7	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500	3.2	97.4	98.7	98.7	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	3.2	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	3.2	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	3.2	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	3.2	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	3.2	98.1	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

155

# CEILING VERSUS VISIBILITY

NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

42213  
STATION

FUTEMA, OKINAWA  
STATION NAME

73-77

YEARS

DEC  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (L.S.T.)

CEILING (FEET)	VISIBILITY (STATUTE MILES)												
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ 0
NO CEILING	6.8	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
≥ 20000	6.9	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 18000	6.9	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 16000	6.9	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 14000	6.9	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
≥ 12000	6.9	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2
≥ 10000	7.7	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9
≥ 9000	7.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
≥ 8000	9.8	48.5	48.5	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
≥ 7000	10.1	52.1	52.2	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 6000	10.1	53.0	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
≥ 5000	10.7	58.2	58.3	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6
≥ 4500	10.7	59.8	59.8	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1
≥ 4000	11.5	65.7	66.1	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
≥ 3500	12.3	69.7	70.1	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4
≥ 3000	13.5	78.3	78.8	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 2500	14.1	85.3	85.9	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 2000	14.3	90.9	91.9	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5
≥ 1800	14.3	91.1	92.2	92.8	92.8	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 1500	14.6	94.4	95.7	96.3	96.5	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
≥ 1200	14.6	94.6	96.0	96.6	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 1000	14.6	95.7	97.3	97.9	98.3	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 900	14.6	95.9	97.4	98.1	98.5	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 800	14.6	96.0	97.5	98.2	98.6	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 700	14.6	96.1	97.7	98.5	99.0	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600	14.6	96.1	97.8	98.6	99.1	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5
≥ 500	14.6	96.1	97.8	98.6	99.2	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	14.6	96.2	97.9	98.7	99.3	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300	14.6	96.2	97.9	98.7	99.3	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	14.6	96.2	97.9	98.7	99.3	99.5	99.7	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	14.6	96.2	97.9	98.7	99.3	99.5	99.7	99.9	99.9	99.9	99.9	99.9	99.9
0	14.6	96.2	97.9	98.7	99.3	99.5	99.7	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

1240



# CEILING VERSUS VISIBILITY

NAVY WEATHER SERVICE DETACHMENT, ASHEVILLE, NC

STATION NAME  
PATERIA, OKINAWA

73-77

YEARS

ALL  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)														≥ 0
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0	
NO CEILING	3.1	32.7	32.9	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
≥ 20000	10.3	39.0	39.2	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
18000	10.3	39.0	39.3	39.3	39.3	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
16000	10.3	39.1	39.3	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
14000	10.3	39.3	39.6	39.6	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
12000	10.6	41.1	41.3	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4
10000	12.0	46.4	46.8	46.8	46.8	46.8	46.8	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9
9000	12.1	46.9	47.4	47.4	47.4	47.4	47.4	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
8000	13.6	55.9	56.5	56.6	56.6	56.6	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
7000	13.9	58.1	58.7	58.9	58.9	58.9	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0
6000	13.9	58.5	59.2	59.3	59.3	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
5000	14.2	60.4	61.1	61.3	61.3	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4
4500	14.4	61.5	62.2	62.4	62.4	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
4000	14.9	65.1	65.9	66.1	66.1	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
3500	15.4	67.4	68.3	68.5	68.6	68.6	68.6	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
3000	16.1	72.4	73.4	73.7	73.8	73.8	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
2500	16.8	76.3	77.6	78.1	78.3	78.3	78.4	78.4	78.4	78.4	78.4	78.5	78.5	78.5	78.5
2000	17.5	80.8	82.2	82.8	83.0	83.1	83.2	83.2	83.2	83.3	83.3	83.3	83.3	83.3	83.3
1800	17.6	81.1	82.5	83.1	83.3	83.4	83.5	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6
1500	18.5	87.0	88.8	89.5	89.8	89.9	90.1	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2
1200	18.8	88.8	90.8	91.6	91.9	92.1	92.3	92.4	92.4	92.4	92.4	92.5	92.5	92.5	92.5
1000	18.9	91.4	93.7	94.7	95.1	95.3	95.5	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8
900	18.9	91.8	94.1	95.2	95.7	95.8	96.2	96.3	96.3	96.4	96.4	96.4	96.4	96.4	96.4
800	18.9	92.1	94.6	95.8	96.3	96.5	96.8	97.0	97.0	97.1	97.1	97.2	97.2	97.2	97.2
700	18.9	92.5	95.0	96.3	96.9	97.1	97.5	97.7	97.7	97.8	97.9	97.9	97.9	97.9	97.9
600	18.9	92.8	95.4	96.8	97.4	97.7	98.0	98.3	98.3	98.4	98.4	98.5	98.5	98.5	98.5
500	18.9	93.0	95.7	97.2	97.9	98.2	98.6	98.9	98.9	99.1	99.1	99.2	99.2	99.3	99.3
400	18.9	93.1	95.9	97.4	98.1	98.4	98.9	99.1	99.2	99.4	99.5	99.6	99.6	99.7	99.7
300	18.9	93.1	95.9	97.4	98.2	98.5	98.9	99.2	99.3	99.5	99.6	99.7	99.7	99.8	99.8
200	18.9	93.1	95.9	97.5	98.2	98.5	99.0	99.3	99.3	99.6	99.7	99.8	99.8	99.9	100.0
100	18.9	93.1	95.9	97.5	98.2	98.5	99.0	99.3	99.3	99.6	99.7	99.8	99.8	99.9	100.0
0	18.9	93.1	95.9	97.5	98.2	98.5	99.0	99.3	99.3	99.6	99.7	99.8	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 14607





7.

MONTH







# SKY COVER

42215

FUTEMA, OKINAWA

73-77

MAY

STATION

STATION NAME

PERIOD

**MONTH**

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
MAY	00	2.6	.6	5.8	9.7	5.2	5.8	4.5	7.7	7.7	8.4	41.9	7.3	155
	03	3.9	1.3	1.3	9.0	6.5	8.4	4.5	12.3	7.1	6.5	39.4	7.2	155
	06		.6	1.3	7.1	6.5	7.7	1.9	6.5	14.8	14.8	38.7	7.9	155
	09		.6	.6	2.6	2.6	6.5	3.9	9.0	18.1	9.7	46.5	8.3	155
	12		.6	1.3	3.9	3.9	6.5	1.3	10.3	18.7	10.3	43.2	8.2	155
	15			1.9	2.6	5.2	7.1	3.9	5.8	13.5	17.4	42.6	8.2	155
	18		.6	.6	5.8	5.8	6.5	1.9	7.1	12.3	13.5	45.6	8.1	155
	21	1.3	.6	5.8	8.4	5.8	2.6	3.9	9.7	9.0	9.7	43.2	7.6	155
TOTALS		1.0	.6	2.3	6.1	5.2	6.4	3.2	8.6	12.7	11.3	42.7	7.9	1240





# SKY COVER

5704 SKY COVER JAN 68

JUL  
MONTH

73-77  
PERIOD

42215 FUTEMA, OKINAWA  
STATION NAME

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.
		0	1	2	3	4	5	6	7	8	9	10	
JUL	00		5.2	6.5	16.1	11.6	11.0	5.8	5.8	8.4	7.1	22.6	6.0 155
	03	3.2	7.1	6.5	11.0	12.3	8.4	3.2	6.5	12.9	7.1	21.9	5.9 155
	06		1.9	3.2	8.4	8.4	8.4	3.9	13.5	14.8	12.9	24.5	7.1 155
	09		.6	1.3	4.5	6.5	7.7	9.7	11.6	21.9	13.5	22.6	7.4 155
	12		.6	2.6	3.9	5.8	5.8	7.1	17.4	22.6	12.3	21.9	7.4 155
	15			1.3	4.5	8.4	12.3	2.6	12.3	18.1	10.3	30.3	7.5 155
	18			1.3	4.5	7.7	16.1	5.8	11.0	10.3	17.4	25.8	7.4 155
	21			6.5	8.4	10.3	9.7	11.6	9.7	12.9	7.1	23.9	6.7 155
TOTALS		.4	1.9	3.7	7.7	8.9	9.9	6.2	11.0	15.2	11.0	24.2	6.9 1240

NAVWEASERVCOM

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## SKY COVER

SEP

MONTH

73-77

PERIOD

42215 FUTEMA, OKINAWA

STATION NAME

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
SEP	00	1.3	3.3	7.3	17.3	9.3	12.0	4.7	12.7	8.7	7.3	16.0	5.8	150
	03	3.3	5.3	9.3	13.3	12.7	9.3	5.3	8.7	9.3	8.7	14.7	5.5	150
	06	.7	2.7	4.0	12.0	10.7	12.7	4.0	8.7	14.0	14.7	16.0	6.4	150
	09	.7	1.3	6.7	8.0	7.3	11.3	4.0	15.3	14.7	9.3	21.3	6.7	150
	12		.7	1.3	8.0	7.3	14.0	6.7	11.3	15.3	12.0	23.3	7.1	150
	15			4.7	6.7	8.0	7.3	3.3	10.7	16.0	22.0	21.3	7.3	150
	18			2.0	6.0	8.0	8.7	2.0	10.7	20.0	17.3	25.3	7.5	150
	21	1.3	4.7	6.0	8.0	12.7	8.0	4.7	9.3	19.3	7.3	18.7	6.3	150
TOTALS		.9	2.3	5.2	9.9	9.5	10.4	4.3	10.9	14.7	12.3	19.6	6.6	1200











# SKY COVER

5704 SKY COVER JAN 68

42215 FUTEMA, OKINAWA STATION NAME PERIOD 73-77 MONTH ALL

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
JAN	ALL	3.0	2.9	4.8	7.0	6.8	6.0	4.2	9.5	12.0	9.7	34.4	7.1	1240
FEB		1.8	2.5	4.3	5.4	6.1	6.3	6.0	8.6	12.2	10.7	36.2	7.4	1128
MAR		3.6	5.2	5.0	8.4	5.2	3.9	5.3	5.8	8.8	7.0	41.9	7.1	1240
APR		2.2	2.0	4.8	5.3	6.4	7.0	4.7	10.4	13.5	10.9	32.9	7.2	1200
MAY		1.0	.6	2.3	6.1	5.2	6.4	3.2	8.6	12.7	11.3	42.7	7.9	1240
JUN		.1	.5	.8	2.3	3.2	5.4	2.6	6.3	15.8	16.7	46.4	8.5	1198
JUL		.4	1.9	3.7	7.7	8.9	9.9	6.2	11.0	15.2	11.0	24.2	6.9	1240
AUG		.4	.6	4.5	6.9	8.5	11.3	5.7	11.3	17.0	11.5	22.5	7.0	1240
SEP		.9	2.3	5.2	9.9	9.5	10.4	4.3	10.9	14.7	12.3	19.6	6.6	1200
OCT		1.8	2.6	6.1	8.5	10.4	7.9	4.5	8.1	15.4	10.5	24.3	6.7	1240
NOV		1.3	3.7	5.3	8.6	6.6	7.7	3.9	7.7	12.8	10.3	32.2	7.0	1200
DEC		2.0	3.8	5.1	5.9	7.4	5.7	3.6	9.2	10.5	10.1	36.9	7.2	1240
TOTALS		1.5	2.4	4.3	6.8	7.0	7.3	4.5	9.0	13.4	11.0	32.9	7.2	14606

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NAVAL WEATHER SERVICE DETACHMENT ASHEVILLE N C  
SUMMARY OF METEOROLOGICAL OBSERVATIONS, SURFACE (SMOS), FUTENMA--ETC(U)  
JUL 78

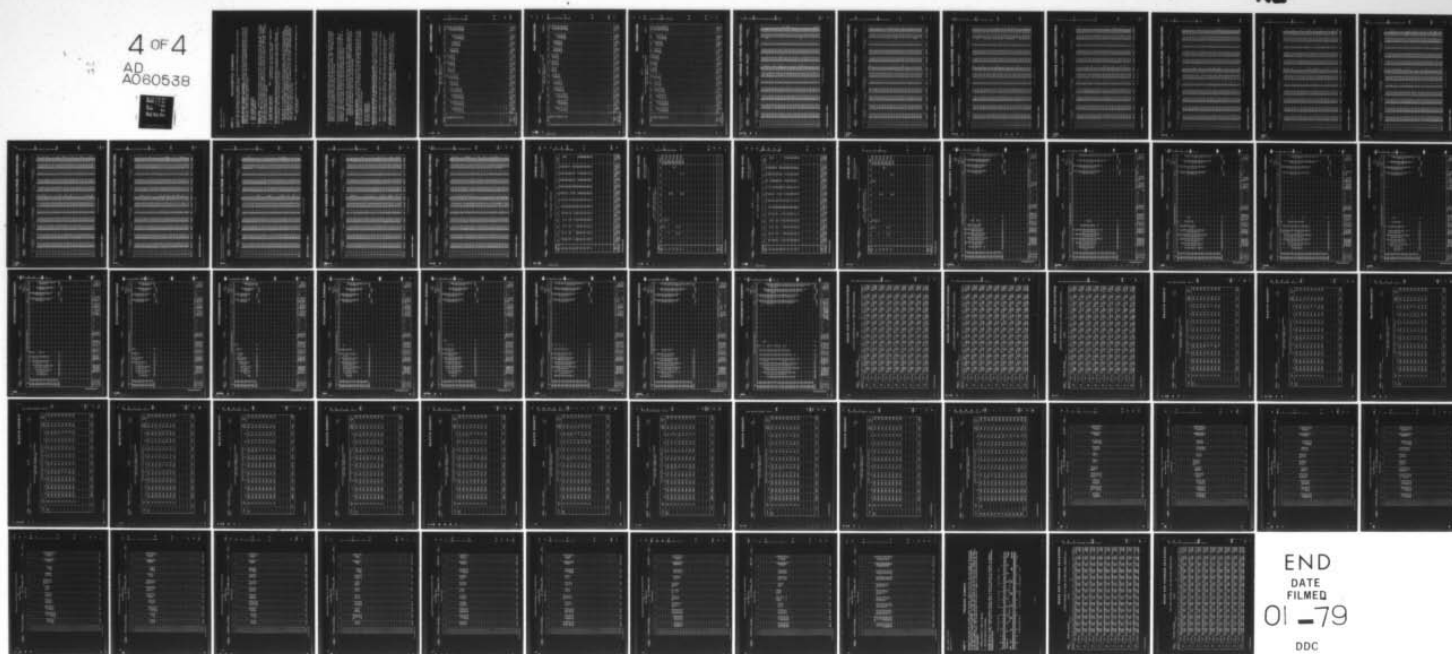
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4 OF 4

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## PART E PSYCHROMETRIC SUMMARIES

In this section are presented various summaries of dry- and wet-bulb temperatures, dew points, and relative humidity. The order and manner of presentation follows:

1. Cumulative percentage frequency of occurrence - derived from daily observations and presented by month and annual for all years combined. These tabulations provide the cumulative percentage frequency to tenths of temperature by 5-degree Fahrenheit increments, plus mean temperature, standard deviation, and total number of observations in three separate tables as follows:
  - a. Daily maximum temperature
  - b. Daily minimum temperature
  - c. Daily mean temperature
2. Extreme values - derived from daily observations with extreme value given for each year and month of record available. Extremes are provided for a month if all days for a month contain valid observations. All months for a year must have valid extremes before the ANNUAL value is selected for that year. Means and standard deviations are computed for months and annual when four or more values are present for any column. Two tables of daily extreme temperatures are prepared:
  - a. Extreme maximum temperature
  - b. Extreme minimum temperature
3. Bivariate percentage frequency distribution and computations of dry-bulb versus wet-bulb temperature. This tabulation is derived from 3-hourly observations and is presented by month and annual, all hours and all years combined. The following information is provided:
  - a. The main body of the summary consists of a bivariate percentage frequency distribution of wet-bulb depression in 17 classes spread horizontally; by 2-degree intervals of dry-bulb temperature vertically. Also provided for each dry-bulb temperature interval is the total no. of observations with dry-bulb and wet-bulb temperature combined; and again for dry-bulb, wet-bulb, and dew-point temperatures separately. Total observations for these four items is also provided in two lines at end of each tabulation table, which may require two pages in some cases.

NOTE: A supplementary list also provides extreme temperatures when less than a full month is reported.

NOTE: A percentage frequency in this table of ".0" represents one or more occurrences amounting to less than .05 percent.



b. Statistical data for the individual elements of relative humidity, dry-bulb, wet-bulb, and dew-point temperatures are shown in the section at the bottom left of the forms. These consist of the sum of squares ( $\sum X^2$ ), sums of values ( $\sum X$ ), means ( $\bar{X}$ ), and standard deviations ( $\sigma x$ ). The number of observations used in the computations for each element is also shown.

c. At the lower right of the form are given the mean number of hours of occurrence for six ranges of dry-bulb, wet-bulb, and dew-point temperatures, and total number of hours possible in the period represented. Mean number of hours is shown to tenths and indicates mean number of hours per year in the annual summary, or mean number of hours per month in the tabulations by month.

NOTE: Wet-bulb temperature usually was not reported prior to 1946. Relative humidity usually was not reported prior to 1949, nor subsequent to June 1958; and was computed by machine methods for observations recorded during these periods. All values of dew-point temperature and relative humidity are with respect to water, unless otherwise indicated.

4. Means and standard deviations - These tabulations are derived from hourly observations and present the mean, standard deviation, and total number of observations for the eight standard 3-hour groups, by month and annual and again at the bottom for all hours combined. Records for all years available are combined. Tables are prepared for the following:

- a. Dry-bulb temperature
- b. Wet-bulb temperature
- c. Dew-point temperature

5. Cumulative percentage frequency of occurrence of relative humidity - This summary is derived from hourly observations and presents the cumulative percentage frequency of occurrence of relative humidity by increments of 10% classes, plus the mean relative humidity and total number of observations in two tables.

a. Table 1 is prepared by month and annual, all years combined, with month being the vertical argument.

b. Table 2 is prepared by month by standard 3-hour groups, with the hour groups being the vertical argument and a separate page for each month. All years are also combined for this summary.

6. Percentage frequency of occurrence of dry-bulb temperature versus wind direction - This tabulation is derived from hourly observations and is presented by month and annual, all hours and years combined. The main body of the summary consists of dry bulb temperatures spread vertically in four degree increments and horizontally by eight wind directions (plus calm).

## DAILY TEMPERATURES

42213  
STATIONFUTEMA, OKINAWA  
STATION NAME

60-77

YEARS

MAXIMUM

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM DAILY OBSERVATIONS)

TEMP (°F)	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
95						.2		.2	.2				.0
90						4.7	19.5	9.4	6.3				3.6
85						46.3	80.4	83.6	72.2	12.3			28.3
80		.2		3.6	10.7	79.8	99.1	99.8	97.6	63.2	12.1		46.1
75		1.2	1.3	18.3	50.8	95.1	100.0	100.0	100.0	93.4	57.6	.2	62.2
70	3.0	6.6	12.8	51.1	91.1	99.6				99.8	88.5	8.5	77.4
65	16.3	28.9	43.0	85.5	99.4	100.0				100.0	99.6	80.1	89.3
60	47.0	58.7	78.7	97.8	100.0						100.0	94.9	96.3
55	79.6	82.6	95.3	99.6								99.2	99.5
50	97.0	97.6	99.8	100.0								100.0	100.0
45	100.0	100.0	100.0										
40													
35													
30													
25													
20													
15													
10													
5													
0													
MEAN	64.1	65.8	68.6	74.8	79.6	83.2	87.3	86.7	85.7	80.4	74.9	68.6	76.6
S. D.	5.346	5.106	5.165	5.240	3.860	4.483	2.707	2.251	2.706	3.555	3.977	4.916	9.079
TOTAL OBS.	496	409	446	448	496	510	558	555	540	527	521	528	6034

NAVWEASERVCOM

5721 Daily Temperature, Jan 1969

## DAILY TEMPERATURES

42215  
STATIONFUTEMA, OKINAWA  
STATION NAME

60-77

YEARS

VAVA
<u>STATION NAME</u>

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM DAILY OBSERVATIONS)

TEMP (°F)	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
85								.2					.0
80						7.5	29.0	23.4	10.2				6.4
75				2.5	13.5	56.5	93.9	95.9	76.7	20.4	1.3		32.3
70	.4		.7	19.9	62.1	88.8	100.0	99.8	97.6	67.8	19.2	.8	49.0
65	3.4	5.9	13.7	53.8	92.5	98.6		100.0	100.0	93.5	62.8	11.0	63.6
60	16.7	30.3	44.4	82.8	99.4	100.0				99.4	93.5	51.3	78.1
55	51.8	56.0	78.7	97.8	100.0					100.0	100.0	86.0	90.1
50	88.1	89.2	97.5	100.0								99.2	98.0
45	99.4	99.8	99.8									100.0	99.9
40	100.0	100.0	100.0										100.0
MEAN	55.0	56.1	58.8	64.9	70.3	74.6	78.2	78.1	76.3	71.0	65.7	59.4	67.4
S. D.	4.683	5.460	4.974	5.176	3.897	4.014	2.167	1.973	2.916	4.077	4.156	4.365	9.153
TOTAL OBS.	496	409	446	448	496	510	558	555	540	525	521	528	6032

**NAWEASERVCOM**



STATION NAME
FUTEMA, OKINAWA

60-77

YEARS

MEAN

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM DAILY OBSERVATIONS)

[illegible]

NAVWEASERVCOM

# DAILY AVERAGE/EXTREME TEMPERATURES

5725 DAILY AVERAGE/EXTREME TEMP MAR 1978

42215

FUTEMA, OKINAWA

1961-1966 1968-1977

JANUARY

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		AVERAGE		EXTREME		DATE		MINIMUM TEMP		AVERAGE		EXTREME		DATE	
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C			° F	° C	° F	° C	° F	° C		
1	60.6	15.9	65.1	18.4	76	24.4	1964	1964	56.2	13.4	48	8.9	1961	1961	56.2	13.4	48	8.9	1961	1961
2	59.8	15.4	64.6	18.1	73	22.8	1970	1970	55.0	12.8	46	7.8	1961	1961	55.0	12.8	46	7.8	1961	1961
3	59.8	15.4	64.4	18.0	70	21.1	1976*	1976*	55.2	12.9	50	10.0	1966	1966	55.2	12.9	50	10.0	1966	1966
4	60.0	15.6	64.1	17.8	72	22.2	1972	1972	55.8	13.2	50	10.0	1962	1962	55.8	13.2	50	10.0	1962	1962
5	59.4	15.2	63.5	17.5	72	22.2	1972	1972	55.2	12.9	48	8.9	1970	1970	55.2	12.9	48	8.9	1970	1970
6	59.2	15.1	63.8	17.7	72	22.2	1973	1973	54.6	12.6	47	8.3	1966	1966	54.6	12.6	47	8.3	1966	1966
7	60.7	15.9	64.9	18.3	72	22.2	1973	1973	56.6	13.7	45	7.2	1963	1963	56.6	13.7	45	7.2	1963	1963
8	60.6	15.9	65.0	18.3	71	21.7	1975*	1975*	56.2	13.4	47	8.3	1963	1963	56.2	13.4	47	8.3	1963	1963
9	60.5	15.8	64.2	17.9	73	22.8	1961	1961	56.7	13.7	48	8.9	1963	1963	56.7	13.7	48	8.9	1963	1963
10	61.2	16.2	66.4	19.1	74	23.3	1961	1961	56.1	13.4	45	7.2	1965	1965	56.1	13.4	45	7.2	1965	1965
11	60.6	15.9	64.9	18.3	73	22.8	1966*	1966*	56.3	13.5	47	8.3	1963	1963	56.3	13.5	47	8.3	1963	1963
12	59.3	15.2	63.7	17.6	77	25.0	1966	1966	54.9	12.7	48	8.9	1965	1965	54.9	12.7	48	8.9	1965	1965
13	59.5	15.3	64.2	17.9	77	25.0	1966	1966	54.7	12.6	49	9.4	1965*	1965*	54.7	12.6	49	9.4	1965*	1965*
14	58.4	14.7	62.9	17.2	69	20.6	1973	1973	53.9	12.2	48	8.9	1963	1963	53.9	12.2	48	8.9	1963	1963
15	58.1	14.5	62.5	16.9	68	20.0	1964	1964	53.7	12.1	49	9.4	1968*	1968*	53.7	12.1	49	9.4	1968*	1968*
16	58.4	14.7	63.2	17.3	73	22.8	1966	1966	53.6	12.0	49	9.4	1970*	1970*	53.6	12.0	49	9.4	1970*	1970*
17	58.9	14.9	64.4	18.0	75	23.9	1966	1966	53.4	11.9	44	6.7	1963	1963	53.4	11.9	44	6.7	1963	1963
18	59.1	15.1	63.9	17.7	74	23.3	1969	1969	54.2	12.3	44	6.7	1963	1963	54.2	12.3	44	6.7	1963	1963
19	59.4	15.2	63.7	17.6	74	23.3	1969	1969	55.0	12.8	49	9.4	1963	1963	55.0	12.8	49	9.4	1963	1963
20	58.4	14.7	63.0	17.2	75	23.9	1969	1969	53.9	12.2	42	5.6	1963	1963	53.9	12.2	42	5.6	1963	1963
21	58.8	14.9	64.0	17.8	76	24.4	1969	1969	53.7	12.1	47	8.3	1962	1962	53.7	12.1	47	8.3	1962	1962
22	59.6	15.3	65.2	18.4	75	23.9	1969*	1969*	54.1	12.3	50	10.0	1961	1961	54.1	12.3	50	10.0	1961	1961
23	60.0	15.6	65.1	18.4	72	22.2	1973*	1973*	55.0	12.8	49	9.4	1962	1962	55.0	12.8	49	9.4	1962	1962
24	60.6	15.9	64.3	17.9	75	23.9	1972	1972	56.8	13.8	47	8.3	1962	1962	56.8	13.8	47	8.3	1962	1962
25	59.7	15.4	63.4	17.4	79	26.1	1969	1969	55.9	13.3	47	8.3	1963	1963	55.9	13.3	47	8.3	1963	1963
26	59.1	15.1	63.9	17.7	75	23.9	1969	1969	54.3	12.4	46	7.8	1963	1963	54.3	12.4	46	7.8	1963	1963
27	58.6	14.8	62.2	16.8	77	25.0	1969	1969	54.9	12.7	47	8.3	1963	1963	54.9	12.7	47	8.3	1963	1963
28	59.6	15.3	64.3	17.9	80	26.7	1969	1969	54.9	12.7	49	9.4	1962	1962	54.9	12.7	49	9.4	1962	1962
29	60.3	15.7	65.4	18.6	74	23.3	1969	1969	55.2	12.9	49	9.4	1962	1962	55.2	12.9	49	9.4	1962	1962
30	59.2	15.1	63.3	17.4	74	23.3	1969	1969	55.1	12.8	48	8.9	1963*	1963*	55.1	12.8	48	8.9	1963*	1963*
31	58.1	14.5	62.7	17.1	77	25.0	1969	1969	53.5	11.9	47	8.3	1970*	1970*	53.5	11.9	47	8.3	1970*	1970*
Monthly	59.5	15.3	64.1	17.8	80	26.7	1969	1969	55.0	12.8	42	5.6	1963	1963	55.0	12.8	42	5.6	1963	1963

\*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

# DAILY AVERAGE/EXTREME TEMPERATURES

5725 DAILY AVERAGE/EXTREME TEMP MAR 1978

42215  
STATION

FUTEMA, OKINAWA  
STATION NAME

1961-1966 1968-1977  
YEARS

FEBRUARY  
MONTH

DAY	MEAN TEMP		MAXIMUM TEMP				MINIMUM TEMP					
	AVERAGE		EXTREME		DATE	AVERAGE		EXTREME		DATE		
	° F	° C	° F	° C		° F	° C	° F	° C			
1	58.6	14.8	63.2	17.3	71	21.7	1975*	54.0	12.2	47	8.3	1961
2	59.3	15.2	63.3	17.4	73	22.8	1975	55.2	12.9	48	8.9	1963*
3	60.0	15.6	64.4	18.0	75	23.9	1966	55.5	13.1	47	8.3	1961
4	60.7	15.9	65.5	18.6	77	25.0	1970	55.9	13.3	45	7.2	1961
5	59.5	15.3	63.7	17.6	73	22.8	1974	55.3	12.9	47	8.3	1963
6	59.1	15.1	63.9	17.7	76	24.4	1975	54.3	12.4	43	6.1	1963
7	59.6	15.3	64.9	18.3	73	22.8	1970	54.3	12.4	47	8.3	1969
8	59.9	15.5	64.5	18.1	74	23.3	1963	55.3	12.9	47	8.3	1971
9	60.0	15.6	64.8	18.2	75	23.9	1962	55.3	12.9	49	9.4	1971
10	60.2	15.7	65.0	18.3	74	23.3	1962	55.3	12.9	49	9.4	1971
11	61.4	16.3	66.7	19.3	75	23.9	1962	56.0	13.3	50	10.0	1971
12	59.7	15.4	64.5	18.1	75	23.9	1969	55.0	12.8	48	8.9	1968*
13	60.6	15.9	66.1	18.9	76	24.4	1969	55.1	12.8	46	7.8	1963
14	61.2	16.2	66.7	19.3	77	25.0	1976	55.7	13.2	47	8.3	1963
15	60.6	15.9	65.5	18.6	76	24.4	1969	55.8	13.2	51	10.6	1962
16	61.6	16.4	67.1	19.5	80	26.7	1976	56.1	13.4	46	7.8	1962
17	61.4	16.3	65.9	18.8	75	23.9	1976	56.8	13.8	45	7.2	1977
18	61.7	16.5	66.8	19.3	77	25.0	1976	56.6	13.7	47	8.3	1962
19	62.2	16.8	67.7	19.8	75	23.9	1970*	56.6	13.7	48	8.9	1963
20	62.5	16.9	67.2	19.6	77	25.0	1970	57.8	14.3	46	7.8	1963
21	62.6	17.0	67.7	19.8	77	25.0	1966	57.4	14.1	45	7.2	1962
22	63.3	17.4	68.3	20.2	82	27.8	1970	58.3	14.6	48	8.9	1963
23	61.8	16.6	66.7	19.3	82	27.8	1970	56.9	13.8	45	7.2	1963
24	61.5	16.4	66.7	19.3	77	25.0	1970	56.4	13.6	45	7.2	1963
25	63.4	17.4	68.6	20.3	88	31.1	1970	56.1	14.5	50	10.0	1963
26	63.0	17.2	67.1	19.5	81	27.2	1970	58.9	14.9	50	10.0	1963
27	61.7	16.5	65.8	18.8	76	24.4	1973	57.6	14.2	47	8.3	1963
28	61.4	16.3	66.1	18.9	78	25.6	1973	56.6	13.7	45	7.2	1963
29	57.7	14.3	63.0	17.2	68	20.0	1976	52.5	11.4	48	8.9	1972
30												
31												
Monthly	61.0	16.1	65.8	18.8	88	31.1	1970	56.1	13.4	43	6.1	1963

\* ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS



NAVY NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

# DAILY AVERAGE/EXTREME TEMPERATURES

STATION 42215 FUTEAMA, OKINAWA STATION NAME 1961-1966 1968-1977 YEARS MONTH MARCH

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		AVERAGE		MINIMUM TEMP		DATE
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	61.6	16.4	66.8	19.3	73	22.8	56.4	13.6	42	5.6	1971*
2	63.2	17.3	68.2	20.1	76	24.4	58.1	14.5	48	8.9	1966
3	63.7	17.6	68.1	20.1	78	25.6	59.3	15.2	50	10.0	1966
4	62.6	17.0	67.4	19.7	78	25.6	57.9	14.4	48	8.9	1966
5	62.0	16.7	67.1	19.5	75	23.9	56.9	13.8	48	8.9	1966
6	61.9	16.6	66.7	19.3	78	25.6	57.1	13.9	49	9.4	1974*
7	63.5	17.5	68.6	20.3	78	25.6	58.5	14.7	51	10.6	1966
8	63.0	17.2	67.7	19.8	79	26.1	58.4	14.7	53	11.7	1976
9	64.6	18.1	68.9	20.5	76	24.4	60.4	15.8	51	10.6	1962
10	64.0	17.8	68.8	20.4	80	26.7	59.1	15.1	50	10.0	1976
11	64.2	17.9	69.1	20.6	80	26.7	59.4	15.2	49	9.4	1976
12	63.2	17.3	67.4	19.7	73	22.8	59.0	15.0	51	10.6	1973
13	63.1	17.3	67.4	19.7	75	23.9	58.9	14.9	50	10.0	1966
14	62.8	17.1	68.2	20.1	73	22.8	57.5	14.2	50	10.0	1977*
15	65.0	18.3	70.4	21.3	77	25.0	59.6	15.3	50	10.0	1966
16	63.5	17.5	68.6	20.3	76	24.4	58.3	14.6	52	11.1	1976
17	62.6	17.0	67.6	19.8	80	26.7	57.7	14.3	50	10.0	1976
18	63.6	17.6	69.5	20.8	79	26.1	57.7	14.3	48	8.9	1976
19	64.7	18.2	69.6	20.9	78	25.6	59.7	15.4	54	12.2	1961
20	65.0	18.3	69.6	20.9	78	25.6	60.5	15.8	54	12.2	1969
21	64.4	18.0	69.4	20.8	76	24.4	59.3	15.2	54	12.2	1969
22	64.3	17.9	69.0	20.6	79	26.1	59.7	15.4	54	12.2	1966
23	63.2	17.3	67.3	19.6	74	23.3	59.2	15.1	54	12.2	1977
24	62.7	17.1	67.9	19.9	76	24.4	57.5	14.2	49	9.4	1972
25	63.6	17.6	68.5	20.3	77	25.0	58.7	14.8	49	9.4	1974*
26	63.3	17.4	67.9	19.9	77	25.0	58.6	14.8	52	11.1	1974
27	63.5	17.5	68.7	20.4	76	25.6	58.4	14.7	50	10.0	1969
28	64.9	18.3	70.5	21.4	76	24.4	59.2	15.1	51	10.6	1971
29	66.0	18.9	70.8	21.6	79	26.1	61.1	16.2	56	12.2	1970
30	66.0	18.9	71.1	21.7	82	27.8	60.9	16.1	51	10.6	1970
31	65.2	18.4	70.7	21.5	83	28.3	59.8	15.4	50	10.0	1970
Monthly	63.7	17.6	68.6	20.3	83	28.3	58.8	14.9	42	5.6	1970

\*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

# DAILY AVERAGE/EXTREME TEMPERATURES

42215

FUTEMA, OKINAWA

STATION

STATION NAME

1961-1966 1968-1977

YEARS

APRIL

MONTH

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		AVERAGE		MINIMUM TEMP		DATE
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	64.6	18.1	69.8	21.0	77	25.0	59.5	15.3	52	11.1	1972
2	65.0	18.3	70.0	21.1	78	25.6	59.9	15.5	55	12.8	1977*
3	65.2	18.4	69.9	21.1	75	23.9	60.6	15.9	52	11.1	1962
4	65.5	18.6	70.5	21.4	76	24.4	60.5	15.8	52	11.1	1962
5	65.0	18.3	70.0	21.1	78	25.6	60.0	15.6	52	11.1	1962
6	67.1	19.5	72.2	22.3	79	26.1	62.0	16.7	55	12.8	1969
7	68.1	20.1	72.9	22.7	79	26.1	63.2	17.3	53	11.7	1969
8	68.6	20.3	73.4	23.0	82	27.8	63.9	17.7	56	13.3	1976
9	68.1	20.1	72.9	22.7	79	26.1	63.3	17.4	53	11.7	1963
10	68.7	20.4	74.0	23.3	85	29.4	63.4	17.4	53	11.7	1963
11	68.7	20.4	74.2	23.4	81	27.2	63.2	17.3	57	13.9	1965
12	68.2	20.1	72.9	22.7	83	28.3	63.5	17.5	57	13.9	1962
13	69.4	20.8	73.9	23.3	85	29.4	64.9	18.3	57	13.9	1968
14	70.5	21.4	75.8	24.3	85	29.4	65.1	18.4	55	12.8	1962
15	71.1	21.7	76.2	24.6	86	30.0	65.9	18.8	53	11.7	1962
16	71.1	21.7	75.4	24.1	82	27.8	66.8	19.3	58	14.4	1962
17	72.3	22.4	77.2	25.1	85	29.4	67.5	19.7	60	15.6	1969
18	70.5	21.4	75.4	24.1	84	28.9	65.6	18.7	56	13.3	1977
19	70.3	21.3	74.7	23.7	85	29.4	65.9	18.8	57	13.9	1977
20	72.3	22.4	77.1	25.1	86	30.0	67.6	19.8	60	15.6	1977
21	71.6	22.0	76.4	24.7	84	28.9	66.7	19.3	61	16.1	1971*
22	71.4	21.9	76.3	24.6	85	29.4	66.5	19.2	59	15.0	1965*
23	71.7	22.1	76.7	24.8	86	30.0	66.7	19.3	61	16.1	1962
24	72.0	22.2	77.0	25.0	85	29.4	66.9	19.4	60	15.6	1976
25	72.8	22.7	77.7	25.4	83	28.3	67.9	19.9	63	17.2	1970*
26	73.2	22.9	78.4	25.8	86	30.0	67.9	19.9	57	13.9	1962
27	71.7	22.1	76.7	24.8	83	28.3	66.6	19.2	57	13.9	1962
28	72.2	22.3	77.9	25.5	88	31.1	66.5	19.2	59	15.0	1961
29	72.5	22.5	77.7	25.4	87	30.6	67.3	19.6	60	15.6	1962
30	72.2	22.3	77.2	25.1	85	29.4	67.1	19.5	60	15.6	1968
31											
Monthlv	69.9	21.1	74.8	23.8	88	31.1	64.9	18.3	52	11.1	1972*

\*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

2

NAVY NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

# DAILY AVERAGE/EXTREME TEMPERATURES

5725 DAILY AVERAGE/EXTREME TEMP MAR 1978

STATION 42215 FUTEWA, OKINAWA 1961-1966 1968-1977 MAY MONTH  
STATION NAME YEARS

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		EXTREME		AVERAGE		MINIMUM TEMP		DATE
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	72.4	22.4	77.6	25.3	88	31.1	88	31.1	67.3	19.6	59	15.0	1965
2	73.3	22.9	78.3	25.7	85	29.4	85	29.4	68.4	20.2	61	16.1	1962
3	73.6	23.1	78.7	25.9	85	29.4	85	29.4	68.4	20.2	61	16.1	1965
4	73.5	23.1	79.2	26.2	86	30.0	86	30.0	67.9	19.9	58	14.4	1965
5	73.0	22.8	78.0	25.6	85	29.4	85	29.4	68.1	20.1	58	14.4	1961
6	72.7	22.6	77.1	25.1	86	30.0	86	30.0	68.4	20.2	61	16.1	1971*
7	73.8	23.2	78.6	25.9	84	28.9	84	28.9	69.1	20.6	60	15.6	1971
8	73.9	23.3	78.6	25.9	85	29.4	85	29.4	69.3	20.7	60	15.6	1971
9	75.0	23.9	80.0	26.7	86	30.0	86	30.0	70.0	21.1	65	18.3	1966
10	75.4	24.1	80.1	26.7	86	30.0	86	30.0	70.7	21.5	63	20.0	1973*
11	75.1	23.9	79.7	26.5	85	29.4	85	29.4	70.4	21.3	60	15.6	1964
12	74.4	23.6	79.2	26.2	85	29.4	85	29.4	69.5	20.8	60	15.6	1970
13	74.3	23.5	79.0	26.1	85	29.4	85	29.4	69.7	20.9	63	17.2	1964
14	75.6	24.2	80.1	26.7	86	30.0	86	30.0	71.1	21.7	64	17.8	1968
15	75.3	24.1	79.9	26.6	86	30.0	86	30.0	70.7	21.5	63	17.2	1968
16	75.8	24.3	80.1	26.7	85	29.4	85	29.4	71.4	21.9	66	18.9	1971
17	74.8	23.8	78.9	26.1	85	29.4	85	29.4	70.7	21.5	62	16.7	1965
18	75.5	24.2	80.4	26.9	86	30.0	86	30.0	70.6	21.4	63	17.2	1965
19	76.3	24.6	81.1	27.3	87	30.6	87	30.6	71.4	21.9	65	18.3	1965
20	75.0	23.9	79.4	26.3	85	29.4	85	29.4	70.6	21.4	65	18.3	1975*
21	74.5	23.6	78.9	26.1	85	29.4	85	29.4	70.1	21.2	65	18.3	1970*
22	74.9	23.8	78.7	25.9	84	28.9	84	28.9	71.1	21.7	65	18.3	1966
23	75.6	24.2	80.2	26.8	89	31.7	89	31.7	70.9	21.6	67	19.4	1975*
24	76.3	24.6	80.9	27.2	86	30.0	86	30.0	71.7	22.1	65	18.3	1966
25	75.6	24.2	79.9	26.6	85	29.4	85	29.4	71.2	21.8	63	17.2	1966
26	76.1	24.5	80.2	26.8	86	30.0	86	30.0	71.9	22.2	66	18.9	1969
27	76.4	24.7	81.1	27.3	88	31.1	88	31.1	71.7	22.1	66	18.9	1969
28	76.8	24.9	81.6	27.6	87	30.6	87	30.6	72.0	22.2	65	18.3	1969
29	76.7	24.8	81.4	27.4	89	31.7	89	31.7	72.1	22.3	65	18.3	1968
30	76.7	24.8	81.3	27.4	87	30.6	87	30.6	72.1	22.3	66	18.9	1968
31	76.4	24.7	80.6	27.0	87	30.6	87	30.6	72.2	22.3	65	18.3	1965
Monthly	75.0	23.9	79.6	26.4	89	31.7	89	31.7	70.3	21.3	58	14.4	1965*

\* ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS



# DAILY AVERAGE/EXTREME TEMPERATURES

NAVAL WEATHER SERVICE DET  
ASHEVILLE, NORTH CAROLINA

42215

**FUTEMA, OKINAWA**

1961-1977

JUNE

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		MAXIMUM TEMP				MINIMUM TEMP					
	AVERAGE		AVERAGE		EXTREME		AVERAGE		EXTREME			
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	DATE	
1	76.5	24.7	80.6	27.0	87	30.6	1976*	72.4	22.4	63	17.2	1968
2	76.7	24.8	80.2	26.8	87	30.6	1976	73.1	22.8	66	18.9	1968
3	77.1	25.1	81.4	27.4	86	30.0	1976*	72.9	22.7	62	16.7	1968
4	77.0	25.0	81.5	27.5	87	30.6	1961	72.5	22.5	64	17.8	1968
5	75.4	24.1	79.8	26.6	85	29.4	1976*	71.1	21.7	62	16.7	1968
6	75.5	24.2	79.6	26.4	89	31.7	1961	71.4	21.9	65	18.3	1969*
7	75.9	24.4	80.9	27.2	88	31.1	1961	70.8	21.6	62	16.7	1969
8	75.4	24.1	79.9	26.6	87	30.6	1961	70.9	21.6	62	16.7	1969
9	76.3	24.6	80.5	26.9	89	31.7	1976	72.2	22.3	67	19.4	1975
10	76.3	24.6	80.4	26.9	87	30.6	1976	72.2	22.3	66	18.9	1975*
11	78.1	25.6	82.8	28.2	90	32.2	1967	73.4	23.0	66	18.9	1968
12	78.1	25.6	82.3	27.9	88	31.1	1961	73.9	23.3	68	20.0	1975
13	77.4	25.2	81.1	27.3	88	31.1	1971	73.6	23.1	66	18.9	1975
14	77.8	25.4	81.9	27.7	87	30.6	1961	73.6	23.1	68	20.0	1969
15	78.3	25.7	82.5	28.1	87	30.6	1977*	74.1	23.4	70	21.1	1975*
16	79.0	26.1	83.1	28.4	90	32.2	1969	74.8	23.8	70	21.1	1970
17	79.8	26.6	84.0	28.9	89	31.7	1975	75.5	24.2	70	21.1	1968
18	79.9	26.6	84.1	28.9	88	31.1	1971*	75.6	24.2	68	20.0	1968
19	80.1	26.7	84.5	29.2	88	31.1	1971*	75.7	24.3	67	19.4	1968
20	80.4	26.9	84.4	29.1	90	32.2	1967	76.5	24.7	68	20.0	1968
21	80.3	26.8	84.2	29.0	90	32.2	1967	76.4	24.7	69	20.6	1969*
22	80.7	27.1	84.8	29.3	91	32.8	1967	76.6	24.8	65	18.3	1968
23	81.0	27.2	85.2	29.6	91	32.8	1967	76.8	24.9	65	18.3	1968
24	81.3	27.4	85.8	29.9	90	32.2	1971*	76.8	24.9	72	22.2	1974
25	82.1	27.8	86.6	30.3	94	34.4	1967	77.6	25.3	69	20.6	1974
26	81.5	27.5	86.2	30.1	92	33.3	1967	76.9	24.9	71	21.7	1974
27	81.7	27.6	86.4	30.2	94	34.4	1967	77.1	25.1	73	22.8	1962
28	82.1	27.8	86.8	30.4	94	34.4	1967	77.4	25.2	73	23.9	1975*
29	82.5	28.1	87.3	30.7	98	36.7	1967	77.6	25.3	73	22.8	1975
30	82.7	28.2	87.1	30.6	93	33.9	1969*	78.4	25.8	74	23.3	1975*
31												
Monthly	78.9	26.1	83.2	28.4	98	36.7	1967	74.6	23.7	62	16.7	1969*

\*ALSO ON EARLIER YEARS

**DIRNA VOCEANMET-SMOS**

# DAILY AVERAGE/EXTREME TEMPERATURES

525 DAILY AVERAGE/EXTREME TEMP MAR 1978

STATION 42215 FUTEWA, OKINAWA STATION NAME 1960-1977 YEARS MONTH JULY

DAY	MEAN TEMP		MAXIMUM TEMP		MINIMUM TEMP		DATE
	AVERAGE ° F	AVERAGE ° C	AVERAGE ° F	EXTREME ° F	AVERAGE ° C	EXTREME ° F	
1	82.2	27.9	86.8	91	30.4	86.8	1977*
2	82.5	28.1	86.8	94	30.4	86.8	1969
3	82.3	27.9	86.7	91	30.4	86.7	1972*
4	82.2	27.9	86.8	92	30.4	86.8	1972
5	82.1	27.8	86.8	92	30.4	86.8	1972*
6	81.9	27.7	86.4	91	30.2	86.4	1972
7	82.6	28.1	86.9	91	30.5	86.9	1972*
8	82.7	28.2	87.2	91	30.7	87.2	1972*
9	83.0	28.3	87.4	91	30.8	87.4	1969*
10	83.4	28.6	88.3	92	31.3	88.3	1963
11	83.4	28.6	87.9	94	31.1	87.9	1971
12	83.6	28.7	88.1	92	31.2	88.1	1977*
13	83.9	28.8	88.5	93	31.4	88.5	1972
14	83.7	28.7	88.3	92	31.3	88.3	1977*
15	83.3	28.5	87.9	93	31.1	87.9	1969
16	83.1	28.4	88.4	92	31.3	88.4	1971
17	83.1	28.4	87.6	91	30.9	87.6	1960
18	83.2	28.4	88.0	93	31.1	88.0	1968
19	83.1	28.4	87.8	94	31.0	87.8	1971
20	82.5	28.1	87.0	91	30.6	87.0	1971
21	82.9	28.3	87.6	91	30.9	87.6	1968
22	82.9	28.3	87.2	91	30.7	87.2	1977
23	82.4	28.0	86.8	91	30.4	86.8	1969
24	82.3	27.9	86.8	90	30.4	86.8	1975*
25	82.5	28.1	86.9	91	30.5	86.9	1969
26	82.2	27.9	86.5	92	30.3	86.5	1968
27	82.2	27.9	86.6	91	30.3	86.6	1966
28	82.1	27.8	86.5	91	30.3	86.5	1962
29	82.6	28.1	87.2	90	30.7	87.2	1963
30	82.2	27.9	86.8	90	30.4	86.8	1965
31	82.4	28.0	86.4	90	30.2	86.4	1970
Monthly	82.7	28.2	87.3	94	30.7	87.3	1971*

\*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

# DAILY AVERAGE/EXTREME TEMPERATURES

5725 DAILY AVERAGE/EXTREME TEMP MAR 1970

STATION **42213** **FUTEMA, OKINAWA** STATION NAME **1960-1977** YEARS **AUGUST** MONTH

DAY	MEAN TEMP		MAXIMUM TEMP			MINIMUM TEMP			DATE
	° F	° C	AVERAGE ° F	° C	EXTREME ° F	AVERAGE ° F	° C	EXTREME ° F	
1	82.2	27.9	86.3	30.2	89	78.2	25.7	76	24.4
2	82.5	28.1	86.8	30.4	89	78.3	25.7	75	23.9
3	82.6	28.1	86.9	30.5	90	78.2	25.7	72	22.2
4	82.4	28.0	86.9	30.5	90	77.6	25.4	74	23.3
5	82.5	28.1	86.7	30.4	90	78.4	25.8	75	23.9
6	82.3	27.9	86.6	30.3	90	78.0	25.6	75	23.9
7	82.8	28.2	87.0	30.6	90	78.6	25.9	73	22.8
8	82.0	27.8	86.9	30.5	90	77.2	25.1	69	20.6
9	82.6	28.1	86.9	30.5	91	78.3	25.7	74	23.3
10	82.3	27.9	87.1	30.6	92	77.5	25.3	70	21.1
11	82.8	28.2	87.0	30.6	90	78.6	25.9	76	24.4
12	82.5	28.1	86.8	30.4	92	78.2	25.7	76	24.4
13	82.5	28.1	86.2	30.1	91	78.9	26.1	75	23.9
14	82.6	28.1	87.2	30.7	91	77.9	25.5	73	22.8
15	82.1	27.8	86.8	30.4	92	77.4	25.2	74	23.3
16	82.7	28.2	86.9	30.5	90	78.4	25.8	76	24.4
17	82.2	27.9	86.3	30.2	90	78.2	25.7	74	23.3
18	82.3	27.9	86.0	30.0	90	78.7	25.9	74	23.3
19	82.3	27.9	86.1	30.1	90	78.6	25.9	74	23.3
20	82.1	27.8	86.1	30.1	90	78.1	25.6	75	23.9
21	82.6	28.1	86.6	30.3	92	78.6	25.9	75	23.9
22	82.5	28.1	86.4	30.2	92	78.5	25.8	76	24.4
23	82.7	28.2	87.2	30.7	95	78.3	25.7	76	24.4
24	82.5	28.1	87.0	30.6	92	77.9	25.5	73	22.8
25	82.3	27.9	86.8	30.4	93	77.8	25.4	75	23.9
26	82.1	27.8	86.7	30.4	93	77.4	25.2	72	22.2
27	81.9	27.7	86.6	30.3	92	77.1	25.1	73	22.8
28	82.3	27.9	86.9	30.5	91	77.7	25.4	73	22.8
29	81.9	27.7	86.2	30.1	91	77.7	25.4	74	23.3
30	82.1	27.8	86.2	30.1	90	78.0	25.6	75	23.9
31	82.4	28.0	86.8	30.4	92	78.0	25.6	72	22.2
Monthly	82.4	28.0	86.7	30.4	95	78.1	25.6	69	20.6

\*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS



## DAILY AVERAGE/EXTREME TEMPERATURES

5725 DAILY AVERAGE/EXTREME TEMP MAR 1978

42215

**FUTEMA, DKINAWA**

1960-1977

**SEPTEMBER**

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		MAXIMUM TEMP				MINIMUM TEMP				
	AVERAGE		AVERAGE		EXTREME		AVERAGE		EXTREME		
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	82.2	27.9	87.0	30.6	91	32.8	1963	77.5	25.3	70	21.1
2	82.4	28.0	87.3	30.7	92	33.3	1967	77.4	25.2	74	23.3
3	82.8	28.2	87.2	30.7	90	32.2	1967	78.4	25.8	75	23.9
4	82.9	28.3	87.4	30.8	91	32.8	1974*	78.4	25.8	75	23.9
5	83.0	28.3	87.3	30.7	90	32.2	1967*	78.7	25.9	74	23.3
6	82.9	28.3	87.4	30.8	91	32.8	1963	78.3	25.7	74	23.3
7	82.6	28.2	87.6	30.9	90	32.2	1963	78.0	25.6	74	23.3
8	82.2	27.9	86.8	30.4	90	32.2	1974*	77.7	25.4	73	22.8
9	82.0	27.8	86.8	30.4	98	36.7	1967	77.2	25.1	74	23.3
10	81.5	27.5	86.2	30.1	91	32.8	1967	76.8	24.9	72	22.2
11	81.6	27.6	86.3	30.2	93	33.9	1967	77.0	25.0	73	22.8
12	82.2	27.9	86.9	30.5	91	32.8	1969	77.6	25.3	72	22.2
13	81.9	27.7	86.5	30.3	90	32.2	1963	77.2	25.1	71	21.7
14	81.5	27.5	86.2	30.1	90	32.2	1972	76.8	24.9	69	20.6
15	80.9	27.2	85.4	29.7	89	31.7	1975*	76.4	24.7	71	21.7
16	81.3	27.4	86.1	30.1	94	34.4	1969	76.6	24.8	71	21.7
17	80.4	26.9	85.0	29.4	88	31.1	1977*	75.8	24.3	71	21.7
18	80.6	27.0	85.3	29.6	90	32.2	1967	75.8	24.3	71	21.7
19	80.6	27.0	85.7	29.8	88	31.1	1969*	75.6	24.2	71	21.7
20	80.3	26.8	85.8	29.9	90	32.2	1963	74.8	23.8	70	21.1
21	80.6	27.0	86.0	30.0	90	32.2	1963	75.3	24.1	70	21.1
22	80.3	26.8	84.7	29.3	88	31.1	1975*	75.9	24.4	70	21.1
23	80.0	26.7	84.5	29.2	88	31.1	1977	75.5	24.2	70	21.1
24	79.7	26.5	84.2	29.0	88	31.1	1977*	75.3	24.1	70	21.1
25	78.9	26.1	83.7	28.7	88	31.1	1977*	74.2	23.4	70	21.1
26	78.5	25.8	83.1	28.4	88	31.1	1963	73.8	23.2	68	20.0
27	78.7	25.9	83.3	28.5	87	30.6	1977*	74.1	23.4	68	20.0
28	79.1	26.2	84.2	29.0	91	32.8	1969	74.1	23.4	67	19.4
29	79.0	26.1	83.9	28.8	88	31.1	1963	74.1	23.4	66	18.9
30	78.9	26.1	84.2	29.0	88	31.1	1963	73.6	23.1	65	18.3
31											
Monthly	81.0	27.2	85.7	29.8	98	36.7	1967	76.3	24.6	65	18.3

• ALSO ON EARLIER YEARS

**DIRNA VOCEANMET-SMOS**

## DAILY AVERAGE/EXTREME TEMPERATURES

NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

42215

FUTEMA, OKINAWA

1960-1977

OCTOBER

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		AVERAGE		MINIMUM TEMP		DATE
	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C	
1	78.9	26.1	83.4	28.6	87	30.6	74.4	23.6	69	20.6	1965
2	78.5	25.8	82.9	28.3	88	31.1	73.8	23.2	68	20.0	1966
3	78.7	25.9	83.4	28.6	88	31.1	73.9	23.3	69	20.6	1965
4	78.1	25.6	82.7	28.2	87	30.6	73.5	23.1	69	20.6	1972*
5	78.3	25.7	83.3	28.5	87	30.6	73.4	23.0	68	20.0	1976*
6	77.9	25.5	83.0	28.3	88	31.1	72.9	22.7	66	18.9	1966
7	77.8	25.4	82.9	28.3	89	31.7	72.7	22.6	66	18.9	1967
8	77.8	25.4	82.8	28.2	86	30.0	72.9	22.7	64	17.8	1967
9	77.2	25.1	81.7	27.6	85	29.4	72.8	22.7	63	17.2	1967
10	77.6	25.3	82.1	27.8	86	30.0	73.1	22.8	66	18.9	1965
11	77.1	25.1	81.5	27.5	86	30.0	72.7	22.6	69	20.6	1971
12	76.3	24.6	80.9	27.2	85	29.4	71.7	22.1	66	18.9	1972
13	76.7	24.8	81.4	27.4	86	30.0	72.1	22.3	66	18.9	1966
14	76.4	24.7	81.4	27.4	86	30.0	71.5	21.9	67	19.4	1966
15	75.4	24.1	79.5	26.4	84	28.9	71.4	21.9	65	18.3	1962
16	75.5	24.2	80.8	27.1	86	30.0	70.2	21.2	64	17.8	1966
17	75.3	24.1	80.1	26.7	86	30.0	70.5	21.4	63	17.2	1966
18	75.3	24.1	79.4	26.3	85	29.4	71.2	21.8	65	18.3	1965
19	74.8	23.8	79.5	26.4	85	29.4	70.1	21.2	60	15.6	1965
20	74.9	23.8	79.5	26.4	85	29.4	70.3	21.3	62	16.7	1960
21	75.7	24.3	80.2	26.8	85	29.4	71.2	21.8	65	18.3	1965*
22	74.9	23.8	79.6	26.4	84	28.9	70.2	21.2	63	17.2	1965
23	74.3	23.5	79.2	26.2	84	28.9	69.4	20.8	64	17.8	1965*
24	74.2	23.4	78.6	25.9	83	28.3	69.8	21.0	65	18.3	1968*
25	73.7	23.2	78.3	25.7	86	30.0	69.1	20.6	63	17.2	1968
26	73.0	22.8	77.8	25.4	83	28.3	68.2	20.1	63	17.2	1960
27	73.6	23.1	77.8	25.4	84	28.9	69.3	20.7	62	16.7	1968
28	72.4	22.4	77.1	25.1	84	28.9	67.8	19.9	60	15.6	1960
29	72.2	22.3	77.7	25.4	82	27.8	66.7	19.3	58	14.4	1960
30	72.3	22.4	77.5	25.3	86	30.0	67.1	19.5	58	14.4	1960
31	72.4	22.4	77.5	25.3	84	28.9	67.3	19.6	60	15.6	1968
Monthly	75.7	24.3	80.4	26.9	89	31.7	71.0	21.7	58	14.4	1960

\*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS



NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

# DAILY AVERAGE/EXTREME TEMPERATURES

5725 DAY AVERAGE/EXTREME TEMP MAR 1978

42215

FUTEMA, OKINAWA

1960-1977

NOVEMBER

STATION

STATION NAME

YEARS

MONTH

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		EXTREME		DATE		AVERAGE		MINIMUM TEMP		EXTREME		DATE	
	° F	° C	° F	° C	° F	° C	° F	° C	DATE	DATE	° F	° C	° F	° C	° F	° C	DATE	DATE
1	72.2	22.3	77.4	25.2	83	28.3	83	28.3	1977	1977	66.9	19.4	61	16.1	61	16.1	1968	1968
2	73.1	22.8	78.1	25.6	81	27.2	81	27.2	1973	1973	68.2	20.1	63	17.2	63	17.2	1967	1967
3	73.1	22.8	78.6	25.9	81	27.2	81	27.2	1974*	1974*	67.6	19.8	62	16.7	62	16.7	1966	1966
4	72.4	22.4	77.2	25.1	81	27.2	81	27.2	1974*	1974*	67.7	19.8	62	16.7	62	16.7	1963	1963
5	72.4	22.4	76.9	24.9	82	27.8	82	27.8	1974*	1974*	67.9	19.9	60	15.6	60	15.6	1962	1962
6	72.2	22.3	76.9	24.9	81	27.2	81	27.2	1965	1965	67.4	19.7	60	15.6	60	15.6	1962	1962
7	72.5	22.5	77.4	25.2	82	27.8	82	27.8	1976	1976	67.6	19.8	61	16.1	61	16.1	1961	1961
8	73.3	22.9	77.8	25.4	83	28.3	83	28.3	1974	1974	68.8	20.4	60	15.6	60	15.6	1961	1961
9	72.8	22.7	77.6	25.3	83	28.3	83	28.3	1974	1974	68.0	20.0	61	16.1	61	16.1	1968*	1968*
10	71.6	22.0	75.9	24.4	84	28.9	84	28.9	1972	1972	67.4	19.7	60	15.6	60	15.6	1968	1968
11	71.3	21.8	76.1	24.5	80	26.7	80	26.7	1974	1974	66.5	19.2	61	16.1	61	16.1	1968	1968
12	71.2	21.8	75.6	24.2	79	26.1	79	26.1	1974*	1974*	66.8	19.3	58	14.4	58	14.4	1968	1968
13	71.4	21.9	75.3	24.1	81	27.2	81	27.2	1972	1972	67.4	19.7	60	15.6	60	15.6	1968	1968
14	70.8	21.6	75.2	24.0	81	27.2	81	27.2	1972	1972	66.5	19.2	59	15.0	59	15.0	1964	1964
15	70.5	21.4	75.1	23.9	80	26.7	80	26.7	1977*	1977*	66.0	18.9	60	15.6	60	15.6	1976	1976
16	71.1	21.7	75.5	24.2	82	27.8	82	27.8	1972	1972	66.6	19.2	60	15.6	60	15.6	1968	1968
17	70.9	21.6	75.4	24.1	81	27.2	81	27.2	1961	1961	66.5	19.2	59	15.0	59	15.0	1968	1968
18	70.4	21.3	74.8	23.8	81	27.2	81	27.2	1961	1961	65.9	18.8	61	16.1	61	16.1	1968*	1968*
19	70.6	21.4	75.5	24.2	81	27.2	81	27.2	1963	1963	65.7	18.7	59	15.0	59	15.0	1971	1971
20	70.1	21.2	74.9	23.8	79	26.1	79	26.1	1970*	1970*	65.4	18.6	60	15.6	60	15.6	1973*	1973*
21	68.8	20.4	72.8	22.7	78	25.6	78	25.6	1970*	1970*	64.7	18.2	58	14.4	58	14.4	1966	1966
22	68.4	20.2	72.7	22.6	80	26.7	80	26.7	1960	1960	64.2	17.9	56	13.3	56	13.3	1976	1976
23	68.0	20.0	71.9	22.2	80	26.7	80	26.7	1960	1960	64.0	17.8	58	14.4	58	14.4	1975	1975
24	67.6	19.8	72.1	22.3	78	25.6	78	25.6	1965*	1965*	63.2	17.3	57	13.9	57	13.9	1975	1975
25	68.0	20.0	73.2	22.9	80	26.7	80	26.7	1970*	1970*	62.8	17.1	58	14.4	58	14.4	1975*	1975*
26	68.1	20.1	72.8	22.7	80	26.7	80	26.7	1970	1970	63.3	17.4	58	14.4	58	14.4	1976	1976
27	67.1	19.5	71.6	22.0	79	26.1	79	26.1	1970	1970	62.6	17.0	57	13.9	57	13.9	1963	1963
28	67.5	19.7	72.0	22.2	78	25.6	78	25.6	1970*	1970*	63.0	17.2	57	13.9	57	13.9	1963*	1963*
29	67.3	19.6	71.7	22.1	78	25.6	78	25.6	1961	1961	62.9	17.2	57	13.9	57	13.9	1971*	1971*
30	65.7	18.7	69.9	21.1	75	23.9	75	23.9	1964*	1964*	61.5	16.4	57	13.9	57	13.9	1971	1971
31																		
Monthly	70.3	21.3	74.9	23.8	84	28.9	84	28.9	1972	1972	65.7	18.7	56	13.3	56	13.3	1976	1976

\*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS



NAVAL WEATHER SERVICE DETACHMENT  
ASHEVILLE, NORTH CAROLINA

# DAILY AVERAGE/EXTREME TEMPERATURES

25 DAILY AVERAGE/EXTREME TEMP MAR 1978

STATION 42215 FUTEMA, OKINAWA STATION NAME 1960-1977 YEARS MONTH DECEMBER

DAY	MEAN TEMP		AVERAGE		MAXIMUM TEMP		AVERAGE		MINIMUM TEMP		DATE
	° F	° C	° F	° C	° F	° C	° F	° C	° F	° C	
1	65.3	18.5	69.7	20.9	79	26.1	60.9	16.1	55	12.8	1966
2	66.2	19.0	70.2	21.2	80	26.7	62.3	16.8	57	13.9	1965*
3	65.9	18.8	70.4	21.3	78	25.6	61.4	16.3	56	13.3	1973
4	65.8	18.8	70.6	21.4	78	25.6	60.9	16.1	56	13.3	1964*
5	65.8	18.8	71.0	21.7	77	25.0	60.6	15.9	55	12.8	1964
6	65.4	18.6	70.2	21.2	78	25.6	60.6	15.9	55	12.8	1963
7	65.7	18.7	70.7	21.5	79	26.1	60.8	16.0	55	12.8	1962
8	64.3	17.9	68.9	20.5	77	25.0	59.6	15.3	53	11.7	1967
9	64.5	18.1	69.2	20.7	76	24.4	59.8	15.4	53	11.7	1976*
10	64.8	18.2	69.8	21.0	73	22.8	59.7	15.4	53	11.7	1976*
11	66.0	18.9	70.5	21.4	78	25.6	61.4	16.3	54	12.2	1969*
12	64.5	18.1	68.6	20.3	73	22.8	60.4	15.8	51	10.6	1967
13	64.0	17.8	68.2	20.1	74	23.3	59.7	15.4	53	11.7	1967
14	64.1	17.8	68.5	20.3	75	23.9	59.7	15.4	53	11.7	1967
15	63.4	17.4	67.5	19.7	74	23.3	59.2	15.1	53	11.7	1967
16	64.4	18.0	68.4	20.2	78	25.6	60.5	15.8	54	12.2	1967*
17	64.2	17.9	68.4	20.2	74	23.3	59.9	15.5	52	11.1	1968
18	63.8	17.7	68.6	20.3	75	23.9	58.9	14.9	53	11.7	1963
19	63.1	17.3	67.6	19.8	73	22.8	58.5	14.7	51	11.7	1967*
20	64.3	17.9	69.4	20.8	77	25.0	59.1	15.1	51	10.6	1967
21	63.9	17.7	68.9	20.5	76	24.4	58.9	14.9	53	11.7	1967
22	63.2	17.3	68.0	20.0	79	26.1	58.5	14.7	51	10.6	1967
23	63.2	17.3	68.4	20.2	76	24.4	58.1	14.5	50	10.0	1968*
24	64.0	17.8	68.4	20.2	76	24.4	59.6	15.3	49	9.4	1968
25	63.4	17.4	68.6	20.3	77	25.0	58.1	14.5	51	10.6	1973*
26	63.4	17.4	68.8	20.4	77	25.0	58.0	14.4	51	10.6	1976*
27	62.6	17.0	66.8	19.3	74	23.3	58.5	14.7	50	10.0	1976
28	61.6	16.4	65.8	18.8	75	23.9	57.4	14.1	50	10.0	1967
29	61.2	16.2	65.8	18.8	79	26.1	56.6	13.7	48	8.9	1967
30	61.5	16.4	65.5	18.6	79	26.1	57.4	14.1	47	8.3	1960
31	61.3	16.3	65.5	18.6	74	23.3	57.0	13.9	49	9.4	1960
Monthly	64.0	17.8	68.6	20.3	80	26.7	59.4	15.2	47	8.3	1960

\*ALSO ON EARLIER YEARS

DIRNAVOCEANMET-SMOS

MAXIMUM TEMPERATURE  
FROM DAILY OBSERVATIONS

WHOLE DEGREES FAHRENHEIT

NAVWEASERVCOM

## 2

MAXIMUM TEMPERATURE  
[FROM DAILY OBSERVATIONS]

42215	FUTEMA, OKINAWA	60-77
STATION	STATION NAME	YEARS

WHOLE DEGREES FAHRENHEIT  
/BASED ON LESS THAN FULL MONTHS/

[illegible]

NAVWEASERVCOM



# EXTREME VALUES

MINIMUM TEMPERATURE  
(FROM DAILY OBSERVATIONS)

42215 STATION FUTEMA, OKINAWA YEARS 60-77

WHOLE DEGREES FAHRENHEIT

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
60							74	75	71	58	57	47	
61	46	45			58	72	72	74	71		59	51	
62	47	45	49	52	61	71	76	72	71	65	59	53	45
63	42	43	42	53	64	70	74	74	73	64	57	50	42
64	48				60	64	71	74	74	68	59	55	
65	45	49	49	57	58	69	75	74	69	60	60	51	
66	47	46	51	57	61	65	73	76	65	63	58		
67						65	76	74	68	61	60	48	
68	47			57	62	62	75	72	69	59	58	49	
69	51	47	48	53	63	62	73	72	70			51	
70	47	50	51	57	60	65	72	75	74	65	60	56	47
71	50	47	52	59	60	72	76	73	74	64	57	55	47
72	52	48	48	52	66	70	77	75	68	63	59	55	48
73	51	53	55	60	65	68	72	76	74	70	60	51	51
74	53	51	56	55	66	69	75	78	72	68	61	56	51
75	52	52	54	54	61	66	73	74	72	67	57	56	52
76	49	53	52	56	61	69	72	73	70	63	56	50	49
77	50	45	48	55	67	70	70	75	75	71	58	57	45
MEAN	48.6	48.1	50.4	55.3	62.1	67.6	73.7	74.4	71.1	64.3	58.5	52.4	47.7
S. D.	2.966	3.255	3.686	2.504	2.816	3.280	1.970	1.544	2.676	3.790	1.419	3.163	3.164
TOTAL OBS.	496	394	403	420	496	510	558	496	540	496	510	527	5846

NAVWEASERVCOM

5723 Extreme Values Jan 1969

MINIMUM TEMPERATURE  
(FROM DAILY OBSERVATIONS)

WHOLE DEGREES FAHRENHEIT  
/BASED ON LESS THAN FULL MONTHS/

[illegible]

# PSYCHROMETRIC SUMMARY

42215

FUTENMA, OKINAWA

73-77

JAN

STATION

STATION NAME

YEARS

PAGE 1

HOURS (L.S.T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL		TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.		Dry Bulb	Wet Bulb
72/ 71		.2		.1	.2	.2		.1										.8	8	1	
70/ 69		.2	.2	.3	.5	.5	.2											1.9	19	3	3
68/ 67	.3	.4	1.0	.6	.6	.6	1.2											5.1	51	10	7
66/ 65	.4	.8	1.5	1.5	1.6	.4	.2											7.9	79	21	13
64/ 63	.6	1.4	2.3	3.6	3.0	1.2	.3	.2										13.7	137	37	25
62/ 61	1.0	3.2	1.2	2.9	4.1	1.1												16.9	169	79	37
60/ 59	.5	3.3	2.5	3.5	2.7	1.1	.5											17.7	177	106	66
58/ 57	.4	4.5	5.5	6.4	2.3	1.5	.2											25.7	257	145	91
56/ 55	.1	3.2	4.6	6.1	2.7	.5												21.3	213	187	77
54/ 53		.8	2.1	4.0	.2													8.9	89	220	138
52/ 51	.1		.7	.7														1.9	19	188	144
50/ 49			.2															2	2	146	144
48/ 47																				89	146
46/ 45																				8	125
44/ 43																					102
42/ 41																					68
40/ 39																					24
38/ 37																					18
36/ 35																					9
34/ 33																					2
TOTAL	3.518	321.8	29.8	17.9	7.3	1.1	.2											1240	1240	1240	1240

Mean No. of Hours with Temperature

No. Obs.

$\sigma_x$

$\bar{x}$

$\sum x$

$\sum x^2$

Element (X)

	≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total
Rel. Hum.							744.0
Dry Bulb			46.8				744.0
Wet Bulb			8.4				744.0
Dew Point			6.0				744.0

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# PSYCHROMETRIC SUMMARY

42215 FUTENMA, OKINAWA 73-77 FEB MONTH  
STATION NAME YEARS PAGE 1  
HOURS (LST)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		TOTAL	
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
78/ 77			.1	.1	.1	.1												2	2		
76/ 75		.1	.1	.4	.1	.1												7	7		
74/ 73		.4	.4	.6	.1	.1												16	16	2	
72/ 71	.2	1.2	1.1	.4	.3	.1												35	35	13	11
70/ 69	.4	2.3	1.2	.3	.4	.1												60	60	38	22
68/ 67	.5	3.1	2.8	1.3	1.2	.5												107	107	60	48
66/ 65	1.2	4.1	3.1	1.2	1.4	.8												133	133	73	65
64/ 63	1.1	3.3	2.7	3.0	1.5	.5	.4											140	140	107	72
62/ 61	.4	5.3	3.2	2.0	1.0	.9	.1											146	146	91	84
60/ 59	.2	2.7	2.4	3.3	2.0	.5	.1											126	126	116	85
58/ 57	.3	1.4	2.3	4.0	2.8	.2												127	127	126	85
56/ 55	.1	1.2	2.7	4.0	2.4	.3												119	119	97	87
54/ 53	.7	1.7	2.3	2.0	.8	.1												76	76	94	83
52/ 51		.8	.4	.4	.8	.1												23	23	120	84
50/ 49		.1	.7	.1	.1													9	9	98	63
48/ 47			.1		.1													2	2	58	91
46/ 45																				20	62
44/ 43																				14	66
42/ 41																				1	59
40/ 39																					23
38/ 37																					5
36/ 35																					4
34/ 33																					1
28/ 27																					
TOTAL	4.625	724.624	516.2	3.9	.5													1128	1128	1128	1128

Element (X)	ΣX <sup>2</sup>	ΣX	$\bar{X}$	$\sigma_x$	No. Obs.	Mean No. of Hours with Temperature						Total
Rel. Hum.	6936835	87129	77.2	13.546	1128	≤ 73 F	≥ 73 F	≤ 80 F	≥ 80 F	≥ 93 F	Total	
Dry Bulb	4326734	69592	61.7	5.431	1128	135.2	14.9				672.0	
Wet Bulb	3774968	64832	57.5	6.376	1128	67.3	1.2				672.0	
Dew Point	3366207	61041	54.1	8.582	1128	48.3	1.8				672.0	

Element (X)	ΣX <sup>2</sup>	ΣX	$\bar{X}$	$\sigma_x$	No. Obs.	Mean No. of Hours with Temperature	Total
Rel. Hum.	6936835	87129	77.2	13.546	1128	≥73 F	672.0
Dry Bulb	4326734	69592	61.7	5.431	1128	≥67 F	672.0
Wet Bulb	3774968	64832	57.5	6.576	1128	≥60 F	672.0
Dew Point	3386207	61041	54.1	8.562	1128	≥53 F	672.0

# PSYCHROMETRIC SUMMARY

42215 FUTENMA, OKINAWA 73-77 MAR MONTH  
PAGE 1 HOURS (L.S.T.)

STATION NAME YEARS

42215 FUTENMA, OKINAWA 73-77 STATION NAME YEARS

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		TOTAL	
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
80/ 79				.1	.1	.1	.1	.1										2	2		
78/ 77				.4	.4	.1	.2	.2										8	8		
76/ 75			.1	.4	.2	.1	.2	.2										11	11		
74/ 73		.7	.6	1.0	.2	.2	.2	.2										34	34	6	
72/ 71	.1	1.9	1.7	1.0	.8	.2	.2	.2	.2									73	73	29	13
70/ 69	.4	1.5	1.6	2.1	1.4	.5	.5	.5	.2									101	101	43	41
68/ 67	.6	4.7	4.6	1.5	1.8	.9	.9	.4	.1									181	181	70	49
66/ 65	.4	3.3	4.2	2.7	1.7	2.1	.5	.5										184	184	108	71
64/ 63	.1	5.5	2.8	3.4	2.2	1.7	.1	.1										192	192	150	98
62/ 61	.2	3.8	3.5	3.4	2.6	.5												172	172	153	140
60/ 59		1.6	2.7	3.3	2.1													120	120	142	109
58/ 57	.3	1.0	1.6	3.2	1.4													94	94	148	97
56/ 55	.2	1.0	.4	1.5	.1													39	39	153	126
54/ 53	.1	.1	.2	.5	.3													14	14	120	108
52/ 51				.2	.7													12	12	71	89
50/ 49				.2														3	3	26	71
48/ 47																				2	82
46/ 45																				12	94
44/ 43																				7	30
42/ 41																					3
40/ 39																					4
38/ 37																					7
36/ 35																					6
34/ 33																					2
TOTAL	2.325	2.224	1.24	815.3	6.3	1.7	.2											1240	1240	1240	1240
Element (X)																					
Rel. Hum.										No. Obs.											Total
Dry Bulb										76.7	13.303										744.0
Wet Bulb										64.2	4.935										744.0
Dew Point										59.7	5.653										744.0
										56.4	7.426										744.0

# PSYCHROMETRIC SUMMARY

42215 FUTENMA, OKINAWA

73-77

APR

STATION NAME

YEARS

MONTH

PAGE 1

HOURS (L.S.T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		TOTAL	
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
86/ 85							.2											4	4		
84/ 83		.1	.1		1.2	1.2	.7											25	25		
82/ 81			.2	1.2	1.4	.5												40	40	1	1
80/ 79			1.5	1.6	1.2	.5												58	58	1	
78/ 77		.4	3.6	2.2	1.2	.3	.2											94	94	8	1
76/ 75		2.7	5.1	2.3	.8	.1	.1											134	134	69	7
74/ 73	.3	4.1	4.4	2.7	.8	.4	.1	.2										154	154	150	85
72/ 71	.2	4.8	3.2	1.7	.2	.7	.2											133	133	190	144
70/ 69	.4	2.6	3.6	1.2	1.3	1.4	.2											131	131	131	204
68/ 67	.4	4.3	4.0	1.6	1.1	.7	.2											148	148	131	105
66/ 65	.3	2.0	3.2	2.3	1.0	.7	.1											117	117	119	132
64/ 63	.1	1.2	1.2	1.7	1.2	.1	.2											68	68	87	115
62/ 61		.4	.3	.2	.3	.2	.2	.1										23	23	93	74
60/ 59		.1	1.1	.9	.5	.1												32	32	82	52
58/ 57		.1	.7	.6	.5	.3												26	26	40	49
56/ 55		.2	.2	.5	.1	.1												12	12	33	64
54/ 53				.1														1	1	28	50
52/ 51																			16	16	40
50/ 49																			14	14	17
48/ 47																			4	4	20
46/ 45																				1	18
44/ 43																					7
42/ 41																					9
40/ 39																					3
38/ 37																					4
36/ 35																					2
TOTAL	1.823	.032	.421	.013	.2	6.8	1.5	.2										1200	1200	1200	1200

Element (X)	ΣX <sup>2</sup>	ΣX	X̄	S <sup>2</sup> X	No. Obs.	Mean No. of Hours with Temperature						Total
Rel. Hum.	7715246	95174	79.3	11.796	1200	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F		720.0	
Dry Bulb	6096391	85221	71.0	6.072	1200	552.6	303.4	56.4			720.0	
Wet Bulb	5372208	79926	66.6	6.375	1200	408.6	137.4	.6			720.0	
Dew Point	4984849	76781	64.0	7.753	1200	328.2	100.2	.6			720.0	

Element (X)	$\sum X^2$	$\sum X$	$\bar{X}$	$\bar{C}_x$	No. Obs.	Mean No. of Hours with Temperature					Total
Rel. Hum.	7715246	95174	79.3	11.796	1200	≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 93 F	720.0
Dry Bulb	6096391	85221	71.0	6.072	1200				552.6	303.4	56.4
Wet Bulb	5372208	79926	66.6	6.375	1200				408.6	137.4	.6
Dew Point	4984849	76781	64.0	7.753	1200				328.2	100.2	.6

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# PSYCHROMETRIC SUMMARY

42215 FUTENMA, OKINAWA

73-77

MAY

STATION NAME

YEARS

MONTH

PAGE 1

HOURS (L.S.T.)

5785

PSYCHROMETRIC SUMMARY JAN 68

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
88/ 87						.1												1	1		
86/ 85				.1	.2													3	3		
84/ 83		.1	.6	.3	1.3	.1												30	30	1	1
82/ 81		1.2	1.1	1.6	2.3	.3												62	82	1	
80/ 79		.9	2.7	3.7	1.0	.2	.2	.1										103	108	32	10
78/ 77	1.1	2.7	5.1	2.8	1.2	.7	.3	.2										175	175	48	52
76/ 75	1.7	7.0	6.5	2.3	1.0	.9	.2											244	244	172	85
74/ 73	2.3	5.0	5.1	2.8	1.5	1.0	.2											222	222	278	180
72/ 71	.8	4.8	4.4	3.1	1.8	.5	.1											191	191	185	231
70/ 69	.6	1.9	4.0	2.1	.9	.2												119	119	166	192
68/ 67		.6	1.4	.7	.3	.1												38	38	144	117
66/ 65		.5	.7	.3														19	19	97	111
64/ 63		.2		.2	.1													6	6	75	88
62/ 61				.1														1	1	27	65
60/ 59		.1																1	1	8	53
58/ 57																				6	
56/ 55																					14
54/ 53																					8
52/ 51																					5
TOTAL	6.524	.931	.720	.211	.5	4.0	1.0	.2										1240	1240	1240	1240

Element (X)	ΣX <sup>2</sup>	ΣX	X̄	σ <sub>x</sub>	No. Obs.	Mean No. of Hours with Temperature							Total
						≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F		
Rel. Hum.	8655982	102718	82.8	10.896	1240							744.0	
Dry Bulb	6954929	92729	74.8	4.069	1240							744.0	
Wet Bulb	6256187	87911	70.9	4.369	1240							744.0	
Dew Point	5931676	83504	69.0	5.372	1240							744.0	

Element (X)	ΣX <sup>2</sup>	ΣX	X̄	σ <sub>x</sub>	No. Obs.	Mean No. of Hours with Temperature				Total
Rel. Hum.	8553982	102718	82.8	10.896	1240	≤ 0 F	≤ 32 F	≥ 67 F	≥ 80 F	≥ 93 F
Dry Bulb	6954929	92729	74.8	4.069	1240	727.8	519.0	102.6		744.0
Wet Bulb	6256187	87911	70.9	4.369	1240	616.2	319.2	6.6		744.0
Dew Point	5931676	85504	69.0	5.372	1240	520.8	289.2	6.6		744.0

NAVWEASERVCOM

# PSYCHROMETRIC SUMMARY

42215

FUTENMA, OKINAWA

73-77

JUN

STATION NAME

YEARS

MONTH

Temp.

STATION NAME

73-77

MONTH

PAGE 1

HOURS (L.S.T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL		TOTAL	
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point	
90/ 89					.1	.1												2	2			
88/ 87					.3	.4												13	13			
86/ 85					.7	.8												70	70			
84/ 83					.7	.8												125	125			
82/ 81	.1	.4	.7	.8	.8	.4												185	185	36	8	
80/ 79	.6	.8	.8	.9	.9	.8	.5											235	235	184	101	
78/ 77	.4	.8	.8	.9	.9	.8	.2											224	224	352	224	
76/ 75	.8	.6	.8	.4	.1	.3	.8	.1										153	153	233	328	
74/ 73	.2	.3	.1	.3	.1	.8	.3											90	90	147	194	
72/ 71	.4	.1	.8	.1	.0	.1	.1											61	61	96	126	
70/ 69		.8	.1	.3	.3	.1												29	29	74	79	
68/ 67		.5	.4															11	11	47	52	
66/ 65			.1															1	1	26	43	
64/ 63																				4	36	
62/ 61																					6	
60/ 59																					2	
TOTAL	2.438	4.35	2.15	.1	7.3	1.5												1199	1199	1199	1199	

Element (X)	Mean No. of Hours with Temperature												TOTAL	
	≤ 0 F	≤ 32 F	≤ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total							Total
Rel. Hum.							719.4	658.7	305.7	720.0				
Dry Bulb							702.0	571.7	68.5	720.0				
Wet Bulb							667.8	564.5	65.5	720.0				
Dew Point										720.0				

NAVWEASERVCOM





# PSYCHROMETRIC SUMMARY

42215

FUTENMA, OKINAWA

73-77

AUG

STATION

STATION NAME

YEARS

MONTH

PAGE 1

HOURS (L.S.T.)

05

PSYCHROMETRIC SUMMARY

JAN 68

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		TOTAL	
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
92/ 91								.1										1	1		
90/ 89							.2	.1										13	13		
88/ 87					.7	2.4	2.1	.5										71	71		
86/ 85		.2	2.1	4.8	7.3	2.5	.1											211	211		
84/ 83		.2	7.3	9.0	3.6	.6												258	258	5	1
82/ 81		2.2	12.7	8.5	1.9													313	313	67	10
80/ 79		5.7	13.1	4.4	.2													290	290	288	88
78/ 77	.1	1.2	4.4	.3														74	74	462	305
76/ 75	.1	.2	.5															9	9	317	412
74/ 73																				98	272
72/ 71																				3	138
70/ 69																					14
TOTAL	.2	9.6	40.2	27.7	13.7	5.7	.8	.2										1240	1240	1240	1240
				</																	

Element (X)	Σ X <sup>2</sup>	Σ X	X̄	σ <sub>x</sub>	No. Obs.	Mean No. of Hours with Temperature					Total
						≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	
Rel. Hum.	8065308	99572	80.3	7.499	1240						744.0
Dry Bulb	8415984	102098	82.3	2.773	1240						744.0
Wet Bulb	7428838	95946	77.4	1.996	1240						744.0
Dew Point	7071134	93596	75.5	2.281	1240						744.0

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PSYCHROMETRIC SUMMARY

42215 Futenma, Okinawa 73-77 SEP MONTH  
STATION NAME YEARS PAGE 1 HOURS (L.S.T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		D.B./W.B.	Wet Bulb	Dew Point
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	TOTAL				
90/ 89							.2											5	5			
88/ 87				.5	.5	.5	.6											25	25			
86/ 85		.1	1.2	2.5	4.6	1.9	.2	.1										127	127			
84/ 83		1.1	3.6	5.2	5.6	1.0	.2											199	199	3		
82/ 81	.1	3.0	6.9	6.6	3.4	1.1	.2											255	255	57		
80/ 79	.5	4.4	12.0	5.5	1.5	.7	.2											298	298	151		
78/ 77	.2	3.1	7.1	2.1	.8	.1	.1											161	161	314		
76/ 75		.9	2.2	2.1	1.3	.2												82	82	305		
74/ 73		.2	1.1	.9	.7	.2												36	36	200		
72/ 71		.5	.2	.2	.1													11	11	75		
70/ 69			.1															1	1	60		
68/ 67																				26		
66/ 65																				9		
64/ 63																				41		
62/ 61																				17		
60/ 59																				10		
TOTAL																				4		
		</																				

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# PSYCHROMETRIC SUMMARY

42215 FUTENMA, OKINAWA

73-77

OCT

STATION NAME

YEARS

MONTH

PAGE 1

HOURS (L.S.T.)

PSYCHROMETRIC SUMMARY JAN 68

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		TOTAL	
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
88/ 87						.1	.1											2	2		
86/ 85						.7	.3											15	15		
84/ 83						2.3	.9											64	64		
82/ 81						3.1	1.5											120	120		
80/ 79						4.9	2.3											217	217	15	5
78/ 77						6.1	3.9											264	264	90	22
76/ 75						5.6	4.2											221	221	181	96
74/ 73						4.5	3.1											167	167	207	176
72/ 71						2.8	1.9											107	107	220	174
70/ 69						1.2	1.0											39	39	228	185
68/ 67						.4	.4											13	13	153	161
66/ 65						.8	.8											10	10	84	127
64/ 63																				45	120
62/ 61																				13	98
60/ 59																				1	56
58/ 57																					16
56/ 55																					2
54/ 53																					1
TOTAL																		1239	1239	1239	1239

Mean No. of Hours with Temperature

No. Obs.

$\sigma_x$

$\bar{x}$

$\sum x$

$\sum x^2$

Element (X)

≥ 80 F

≥ 73 F

≥ 67 F

≤ 32 F

≤ 0 F

≥ 93 F

Total

744.0

176.5

642.5

296.0

1.8

3.0

744.0

744.0

744.0

NAVWEASERVCOM



# PSYCHROMETRIC SUMMARY

5700 PSYCHROMETRIC SUMMARY JAN 68

NOV  
MONTH  
PAGE 1  
HOURS (L.S.T.)

73-77

FUTENMA, OKINAWA  
STATION NAME

42215  
STATION

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL		TOTAL	
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
82/ 81																					
80/ 79	.1	.6	.6	.6	.6	.2	.2	.1										29	29	2	1
78/ 77	.2	.8	1.1	1.2	1.3	.2	.7	.1										71	71	19	12
76/ 75	.2	.7	1.8	2.2	1.4	1.2	.4											96	96	20	18
74/ 73	.3	1.5	3.4	2.7	2.2	1.7	.1	.1										143	143	47	24
72/ 71	.3	2.4	3.7	3.9	2.5	1.3	.2											174	174	80	50
70/ 69	.4	1.1	3.9	4.4	3.9	1.7	.6	.1										191	191	118	73
68/ 67	.1	2.2	4.7	4.0	3.9	1.3	.1											196	196	136	96
66/ 65	.1	1.9	2.3	2.9	1.2	.7	.2											113	113	167	112
64/ 63	.2	1.0	.8	3.5	1.9	.2												92	92	179	132
62/ 61	.2	.3	.8	2.2	.8	.1												57	57	161	133
60/ 59	.2	.1	.7	.7	.3													25	25	100	130
58/ 57			.2	.1														3	3	101	118
56/ 55																				51	93
54/ 53																				17	88
52/ 51																				2	56
50/ 49																					40
48/ 47																					17
46/ 45																					6
44/ 43																					1
TOTAL	2.212	8.24	8.28	6.20	0.0	8.7	2.4	.3										1200	1200	1200	1200

NAVWEASERVCOM



# PSYCHROMETRIC SUMMARY

42215 FUTENMA, OKINAWA

73-77

ALL

STATION NAME

YEARS

MONTH

PAGE 1

HOURS (L.S.T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL		TOTAL							
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point							
92/ 91																		1	1									
90/ 89																		39	39									
88/ 87																		176	176									
86/ 85																		578	578	1								
84/ 83																		926	926	15	4							
82/ 81																		1268	1268	235	59							
80/ 79																		1520	1520	963	405							
78/ 77																		1234	1234	1762	1099							
76/ 75																		1036	1036	1552	1595							
74/ 73																		920	920	1246	1463							
72/ 71																		874	874	937	1168							
70/ 69																		814	814	899	959							
68/ 67																		912	912	861	734							
66/ 65																		840	840	818	787							
64/ 63																		849	849	821	806							
62/ 61																		723	723	746	733							
60/ 59																		601	601	697	681							
58/ 57																		565	565	710	576							
56/ 55																		441	441	678	565							
54/ 53																		212	212	586	585							
52/ 51																		61	61	482	527							
50/ 49																		14	14	362	449							
48/ 47																		2	2	169	439							
46/ 45																				44	393							
44/ 43																				21	257							
42/ 41																				1	158							
40/ 39																					77							
38/ 37																					56							
36/ 35																					22							
34/ 33																					8							
28/ 27																					1							
TOTAL	2.220	230.0	23.0	23.9	15.6	6.3	1.5	.2	.0									14606	14606	14606	14606							
Element (X)																			Mean No. of Hours with Temperature				Total					
Rel. Hum.																			≥ 67 F				≥ 80 F		≥ 93 F		Total	
Dry Bulb																			6179.0				6179.0				8760.0	
Wet Bulb																			5083.2				5083.2				8760.0	
Dew Point																			50492.3				50492.3				8760.0	

Mean No. of Hours with Temperature

No. Obs.

$\sigma_x$

$\bar{x}$

$\sum x$

$\sum x^2$

Element (X)

Rel. Hum.

Dry Bulb

Wet Bulb

Dew Point

Total

≥ 93 F

≥ 80 F

≥ 73 F

≥ 67 F

≥ 62 F

≥ 57 F

≥ 52 F

≥ 47 F

≥ 42 F

≥ 37 F

≥ 32 F

≥ 27 F

≥ 22 F

≥ 17 F

≥ 12 F

≥ 7 F

≥ 2 F

≥ -3 F

≥ -8 F

≥ -13 F

≥ -18 F

≥ -23 F

≥ -28 F

≥ -33 F

≥ -38 F

≥ -43 F

≥ -48 F

≥ -53 F

≥ -58 F

≥ -63 F

≥ -68 F

≥ -73 F

≥ -78 F

≥ -83 F

≥ -88 F

≥ -93 F

≥ -98 F

≥ -103 F

≥ -108 F

≥ -113 F

≥ -118 F

≥ -123 F

≥ -128 F

≥ -133 F

≥ -138 F

≥ -143 F

≥ -148 F

≥ -153 F

≥ -158 F

≥ -163 F

≥ -168 F

≥ -173 F

≥ -178 F

≥ -183 F

≥ -188 F

≥ -193 F

≥ -198 F

≥ -203 F

≥ -208 F

≥ -213 F

≥ -218 F

≥ -223 F

≥ -228 F

≥ -233 F

≥ -238 F

≥ -243 F

≥ -248 F

≥ -253 F

≥ -258 F

≥ -263 F

≥ -268 F

≥ -273 F

≥ -278 F

≥ -283 F

≥ -288 F

≥ -293 F

≥ -298 F

≥ -303 F

≥ -308 F

≥ -313 F

≥ -318 F

≥ -323 F

≥ -328 F

≥ -333 F

≥ -338 F

≥ -343 F

≥ -348 F

≥ -353 F

≥ -358 F

≥ -363 F

≥ -368 F

≥ -373 F

≥ -378 F

≥ -383 F

≥ -388 F

≥ -393 F

≥ -398 F

≥ -403 F

≥ -408 F

≥ -413 F

≥ -418 F

≥ -423 F

≥ -428 F

≥ -433 F

≥ -438 F

≥ -443 F

≥ -448 F

≥ -453 F

≥ -458 F

≥ -463 F

≥ -468 F

≥ -473 F

≥ -478 F

≥ -483 F

≥ -488 F

≥ -493 F

≥ -498 F

≥ -503 F

≥ -508 F

≥ -513 F

≥ -518 F

≥ -523 F

≥ -528 F

≥ -533 F

≥ -538 F

≥ -543 F

≥ -548 F

≥ -553 F

≥ -558 F

≥ -563 F

≥ -568 F

≥ -573 F

≥ -578 F

≥ -583 F

≥ -588 F

≥ -593 F

≥ -598 F

≥ -603 F

≥ -608 F

≥ -613 F

≥ -618 F

≥ -623 F

≥ -628 F

≥ -633 F

≥ -638 F

≥ -643 F

≥ -648 F

≥ -653 F

≥ -658 F

≥ -663 F

≥ -668 F

≥ -673 F

≥ -678 F

≥ -683 F

≥ -688 F

≥ -693 F

≥ -698 F

≥ -703 F

≥ -708 F

≥ -713 F

≥ -718 F

≥ -723 F

≥ -728 F

≥ -733 F

≥ -738 F

≥ -743 F



# MEANS AND STANDARD DEVIATIONS

5707 MEANS AND STANDARD DEVIATIONS JAN 68

DRY-BULB TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

73-77

42215 FUTEHA, OKINAWA

STATION

STATION NAME

YEARS

HRS.(L.S.T.)	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
00	MEAN S. D. TOTAL OBS	56.1 3.765 155	60.1 5.090 141	62.5 4.416 155	68.8 5.714 150	73.1 3.268 155	77.0 3.322 150	79.8 2.222 155	80.9 1.866 155	79.2 2.618 150	75.3 3.181 155	68.5 4.508 150	70.6 8.703 1826
03	MEAN S. D. TOTAL OBS	57.9 3.825 155	59.9 5.056 141	62.1 4.439 155	68.6 5.578 150	72.7 3.239 155	76.8 3.304 150	79.2 2.415 155	80.3 1.890 155	78.6 2.803 150	74.9 3.261 154	68.2 4.584 150	70.2 8.606 1825
06	MEAN S. D. TOTAL OBS	57.9 3.670 155	59.7 5.209 141	62.0 4.337 155	68.5 5.557 150	72.6 3.228 155	76.6 3.255 150	79.0 2.447 155	80.1 2.137 155	78.4 2.721 150	74.6 3.376 155	68.1 4.645 150	70.1 8.578 1826
09	MEAN S. D. TOTAL OBS	60.4 3.653 155	62.6 4.889 141	65.3 4.379 155	72.2 5.212 150	76.1 3.603 155	80.0 3.659 149	82.9 2.907 155	83.6 2.128 155	82.4 2.558 150	78.7 3.475 155	71.1 4.502 150	73.4 8.947 1825
12	MEAN S. D. TOTAL OBS	62.7 4.029 155	64.8 5.449 141	67.4 4.982 155	74.6 6.066 150	77.8 3.966 155	81.4 4.121 150	84.4 3.207 155	85.1 2.502 155	83.6 2.851 150	79.9 3.322 155	72.8 4.267 150	75.2 8.785 1826
15	MEAN S. D. TOTAL OBS	62.0 3.858 155	64.2 5.307 141	66.9 4.814 155	74.1 6.136 150	77.5 4.057 155	81.0 4.232 150	84.0 2.867 155	84.5 2.434 155	82.7 3.110 150	79.1 3.239 155	71.9 4.300 150	74.6 8.824 1826
18	MEAN S. D. TOTAL OBS	59.2 3.443 155	61.7 4.890 141	64.6 4.295 155	71.6 5.512 150	75.0 3.558 155	79.2 3.775 150	82.2 2.529 155	82.9 1.926 155	81.1 2.484 150	76.5 3.076 155	69.1 4.379 150	72.3 8.951 1826
21	MEAN S. D. TOTAL OBS	58.3 3.607 155	60.5 5.018 141	63.1 4.438 155	69.7 5.339 150	73.5 3.528 155	77.2 3.403 150	80.3 2.178 155	81.3 1.800 155	79.5 2.606 150	75.6 3.279 155	68.6 4.368 150	71.0 8.687 1826
ALL HOURS	MEAN S. D. TOTAL OBS	59.6 4.136 1240	61.7 5.432 1123	64.2 4.936 1240	71.0 6.090 1200	74.8 4.070 1240	78.6 4.082 1199	81.5 3.304 1240	82.3 2.774 1240	80.7 3.321 1200	76.8 3.813 1239	69.8 4.762 1200	72.2 8.964 14606

NAVWEASERVCOM

# MEANS AND STANDARD DEVIATIONS

5707 MEANS AND STANDARD DEVIATIONS JAN 68

WET-BULB TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

73-77

42215 FUTEMA, OKINAWA

STATION

STATION NAME

YEARS

HRS.(L.S.T.)	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL	
00	MEAN	53.8	56.6	58.7	65.5	70.1	74.7	76.7	76.9	75.0	70.6	63.9	58.2	66.8
	S. D.	4.731	6.589	5.750	6.601	4.399	3.795	2.267	1.895	3.221	3.839	5.250	5.562	9.319
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1824
03	MEAN	53.7	56.6	58.5	65.5	70.0	74.7	76.4	76.6	74.8	70.3	63.9	58.1	66.6
	S. D.	4.541	6.586	5.721	6.610	4.397	3.761	2.373	1.914	3.293	3.806	5.336	5.431	9.259
	TOTAL OBS	155	141	155	150	155	150	155	155	150	154	150	155	1825
06	MEAN	53.8	56.4	58.4	65.4	70.0	74.6	76.4	76.5	74.6	70.3	63.8	58.0	66.6
	S. D.	4.467	6.773	5.676	6.592	4.357	3.647	2.246	1.948	3.257	3.920	5.401	5.481	9.263
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
09	MEAN	55.5	58.4	60.5	67.4	71.8	76.1	78.1	78.2	76.9	72.6	65.5	59.9	68.5
	S. D.	4.310	6.490	5.339	5.958	4.104	3.442	2.278	2.026	2.910	3.790	5.172	5.691	9.130
	TOTAL OBS	155	141	155	150	155	149	155	155	150	155	150	155	1825
12	MEAN	56.3	59.1	61.2	68.2	72.2	76.4	78.4	78.4	77.1	72.6	66.0	60.7	68.9
	S. D.	4.437	6.521	5.444	6.196	4.263	3.457	2.072	1.717	2.787	3.419	5.115	5.663	8.956
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
15	MEAN	56.0	58.8	61.0	68.0	72.0	76.3	78.2	78.3	76.6	72.2	65.5	60.0	68.6
	S. D.	4.406	6.183	5.424	6.127	4.136	3.557	1.843	1.673	2.929	3.466	5.068	5.708	8.968
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
18	MEAN	54.5	57.3	59.8	66.7	70.8	75.4	77.5	77.4	75.7	71.0	64.1	58.6	67.4
	S. D.	4.526	6.400	5.469	6.023	4.214	3.598	2.027	1.791	2.917	3.655	5.246	5.632	9.209
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
21	MEAN	54.0	56.7	59.1	66.1	70.4	74.7	76.8	76.9	74.9	70.6	64.0	58.5	66.9
	S. D.	4.574	6.568	5.685	6.329	4.464	3.743	2.109	1.833	3.215	3.807	5.297	5.588	9.215
	TOTAL OBS	155	141	155	150	155	150	155	155	150	155	150	155	1826
ALL HOURS	MEAN	54.7	57.5	59.7	66.6	70.9	75.4	77.3	77.4	75.7	71.3	64.6	59.0	67.5
	S. D.	4.597	6.576	5.653	6.383	4.369	3.690	2.289	1.996	3.209	3.825	5.292	5.663	9.209
	TOTAL OBS	1260	1128	1240	1200	1240	1199	1240	1240	1200	1239	1200	1240	14604

NAVWEASERVCOM

# MEANS AND STANDARD DEVIATIONS

5707 MEANS AND STANDARD DEVIATIONS JAN 68

DEW-POINT TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

73-77

42215 FUTEMA, OKINAWA

STATION NAME YEARS

HRS.(LST.)	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
00	MEAN 50.1 S. D. 6.600 TOTAL OBS 155	53.7 6.580 155	55.8 7.590 155	63.4 7.949 150	68.5 5.443 155	73.8 4.301 150	75.6 2.648 155	75.3 2.214 155	73.3 3.913 150	66.2 4.862 153	61.1 6.547 150	54.7 7.240 155	64.5 10.684 1826
03	MEAN 50.1 S. D. 6.377 TOTAL OBS 155	53.8 8.560 141	55.8 7.559 155	63.5 8.031 150	68.5 5.463 155	73.8 4.139 150	75.3 2.650 155	75.2 2.221 155	73.2 3.965 150	68.1 4.713 154	61.1 6.562 150	54.7 7.117 155	64.5 10.609 1825
06	MEAN 50.2 S. D. 6.375 TOTAL OBS 155	53.6 8.773 141	55.7 7.507 155	63.4 7.978 150	68.6 5.390 155	73.7 4.019 150	75.3 2.451 155	75.1 2.213 155	73.0 3.965 150	68.2 4.869 153	61.0 6.711 150	54.6 7.213 155	64.4 10.631 1826
09	MEAN 51.6 S. D. 6.168 TOTAL OBS 155	55.1 8.722 141	57.2 7.255 155	64.6 7.611 150	69.7 5.210 155	74.5 3.802 149	76.3 2.579 155	76.1 2.411 155	74.7 3.775 150	69.7 5.012 153	62.2 6.716 150	56.1 7.508 155	65.7 10.472 1825
12	MEAN 51.1 S. D. 6.596 TOTAL OBS 155	54.7 8.689 141	57.0 7.391 155	64.6 7.758 150	69.5 5.559 155	74.4 3.854 150	76.1 2.443 155	76.0 2.247 155	74.5 3.639 150	69.1 4.840 153	61.9 6.896 150	55.9 7.566 155	65.5 10.567 1826
15	MEAN 51.1 S. D. 6.469 TOTAL OBS 155	54.7 8.218 141	56.9 7.333 155	64.6 7.596 150	69.3 5.215 155	74.3 3.947 150	75.9 2.283 155	75.9 2.209 155	74.1 3.759 150	68.8 4.808 153	61.5 6.642 150	55.2 7.680 153	65.2 10.511 1826
18	MEAN 50.5 S. D. 6.456 TOTAL OBS 155	53.8 8.561 141	56.3 7.338 155	63.9 7.395 150	68.8 5.296 155	73.8 4.012 150	75.6 2.409 155	75.3 2.255 155	73.4 3.795 150	68.2 4.767 153	61.0 6.640 150	54.6 7.391 155	64.6 10.547 1826
21	MEAN 50.3 S. D. 6.503 TOTAL OBS 155	53.6 8.609 141	56.2 7.421 155	63.9 7.733 150	68.8 5.380 155	73.7 4.256 150	75.5 2.461 155	75.1 2.231 155	73.0 3.914 150	68.1 4.822 153	61.1 6.694 150	54.8 7.440 155	64.5 10.575 1826
ALL HOURS	MEAN 50.6 S. D. 6.447 TOTAL OBS 1240	54.1 8.582 1128	56.4 7.426 1240	64.0 7.754 1200	69.0 5.373 1240	74.0 4.045 1189	75.7 2.511 1240	75.5 2.281 1240	73.7 3.884 1200	68.5 4.856 1239	61.4 6.673 1200	55.1 7.397 1240	64.9 10.582 14606

NAVWEASERVCOM



# RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

JAN

73-77

42215 FUTENA, OKINAWA

MONTH

PERIOD

STATION NAME

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JAN	00	100.0	100.0	100.0	100.0	98.7	88.4	60.6	34.8	14.8	75.7	155
	03	100.0	100.0	100.0	100.0	98.1	88.4	63.2	38.7	16.1	76.3	155
	06	100.0	100.0	100.0	100.0	96.8	90.3	65.2	38.1	13.5	76.5	155
	09	100.0	100.0	100.0	100.0	97.4	83.2	54.2	33.5	10.3	73.8	155
	12	100.0	100.0	100.0	99.4	90.3	61.3	31.0	18.7	8.4	67.2	155
	15	100.0	100.0	100.0	99.4	95.5	70.3	36.8	18.1	7.7	68.6	155
	18	100.0	100.0	100.0	100.0	97.4	86.5	58.1	27.1	11.0	73.7	155
	21	100.0	100.0	100.0	99.4	98.1	89.7	60.0	34.2	12.9	75.5	155
TOTALS		100.0	100.0	100.0	99.8	96.5	82.3	53.6	30.4	11.8	73.4	1240

5706 RELATIVE HUMIDITY JAN 68

834

73-77

FUTEMA, OKINAWA

42215

MONTH

PERIOD

STATION NAME

STATION

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
FEB	00	100.0	100.0	100.0	100.0	100.0	92.2	73.0	51.1	23.4	80.1	141
	03	100.0	100.0	100.0	100.0	100.0	92.9	76.6	53.9	24.8	81.0	141
	06	100.0	100.0	100.0	100.0	100.0	99.3	78.7	53.2	24.8	81.1	141
	09	100.0	100.0	100.0	100.0	100.0	96.5	64.5	44.7	22.7	77.5	141
	12	100.0	100.0	100.0	100.0	100.0	97.9	47.5	28.4	9.2	71.0	141
	15	100.0	100.0	100.0	100.0	100.0	97.9	53.9	28.4	7.1	72.1	141
	18	100.0	100.0	100.0	100.0	100.0	99.3	62.4	40.4	12.1	76.3	141
	21	100.0	100.0	100.0	100.0	100.0	99.3	68.8	48.9	20.6	78.9	141
TOTALS		100.0	100.0	100.0	100.0	100.0	98.8	65.7	43.6	18.1	77.3	1128

## RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

42215 FUTEHA, OKINAWA 73-77 MAR

STATION NAME PERIOD MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAR	00	100.0	100.0	100.0	100.0	100.0	92.9	68.4	51.6	19.4	79.7	155
	03	100.0	100.0	100.0	100.0	99.4	93.5	71.6	56.1	19.4	80.5	155
	06	100.0	100.0	100.0	100.0	100.0	94.2	72.3	58.1	20.0	80.6	155
	09	100.0	100.0	100.0	100.0	97.4	84.5	65.2	47.1	9.0	76.2	155
	12	100.0	100.0	100.0	100.0	94.8	72.3	52.9	29.0	3.9	70.5	155
	15	100.0	100.0	100.0	100.0	92.9	75.5	50.3	27.7	10.3	71.5	155
	18	100.0	100.0	100.0	100.0	98.7	83.2	61.3	40.0	14.2	75.7	155
	21	100.0	100.0	100.0	100.0	100.0	92.9	69.0	49.0	15.5	78.9	155
TOTALS		100.0	100.0	100.0	100.0	97.9	86.1	63.9	44.8	14.0	76.7	1240



## RELATIVE HUMIDITY

42215

FUTEMA, OKINAWA

73-77

APR

STATION

STATION NAME

PERIOD

MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
APR	00	100.0	100.0	100.0	100.0	100.0	96.7	85.3	72.7	22.0	83.3	150
	03	100.0	100.0	100.0	100.0	99.3	97.3	88.0	72.7	28.0	84.2	150
	06	100.0	100.0	100.0	100.0	99.3	97.3	89.3	70.7	30.0	84.3	150
	09	100.0	100.0	100.0	100.0	98.7	91.3	74.7	52.0	10.7	77.9	150
	12	100.0	100.0	100.0	99.3	95.3	81.3	59.3	24.7	6.0	72.1	150
	15	100.0	100.0	100.0	99.3	98.0	85.3	59.3	28.7	4.7	73.0	150
	18	100.0	100.0	100.0	100.0	98.7	93.3	76.7	44.0	5.3	77.5	150
	21	100.0	100.0	100.0	100.0	99.3	96.0	82.7	70.0	15.3	82.4	150
TOTALS		100.0	100.0	100.0	99.8	98.6	92.3	76.9	54.4	15.3	79.3	1200

# RELATIVE HUMIDITY

MONTH	DAY	TIME	LOCATION	REMARKS
MAY				

73-77

FUTEMA, OKINAWA

42215

MONTH

PERIOD

STATION NAME

STATION

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAY	00	100.0	100.0	100.0	100.0	100.0	99.4	92.9	76.8	29.7	85.9	155
	03	100.0	100.0	100.0	100.0	100.0	99.4	92.9	75.1	32.9	87.0	155
	06	100.0	100.0	100.0	100.0	100.0	99.4	94.8	81.9	37.4	87.7	155
	09	100.0	100.0	100.0	100.0	100.0	95.5	83.9	54.8	22.6	81.4	155
	12	100.0	100.0	100.0	100.0	97.4	91.0	68.4	35.1	12.3	76.6	155
	15	100.0	100.0	100.0	100.0	98.7	93.5	75.5	34.8	10.3	76.7	155
	18	100.0	100.0	100.0	100.0	100.0	97.4	86.5	56.8	16.8	81.6	155
	21	100.0	100.0	100.0	100.0	100.0	100.0	94.8	74.8	29.7	85.7	155
TOTALS		100.0	100.0	100.0	100.0	99.5	97.0	86.2	62.0	24.0	82.8	1240

## 2

5706 RELATIVE HUMIDITY JAN 68

42215 FUTEMA, OKINAWA

73-77

JUN

[illegible]

STATION NAME

PERIOD

MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN								MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.	
		10%	20%	30%	40%	50%	60%	70%	80%			90%
JUN	00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.3	52.7	90.2	150
	03	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.3	54.7	90.9	150
	06	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.3	54.7	91.0	150
	09	100.0	100.0	100.0	100.0	100.0	100.0	97.3	67.8	18.1	83.8	149
	12	100.0	100.0	100.0	100.0	100.0	98.0	85.3	45.3	12.0	80.0	150
	15	100.0	100.0	100.0	100.0	100.0	100.0	87.3	47.3	18.0	80.8	150
	18	100.0	100.0	100.0	100.0	100.0	100.0	95.3	66.0	23.3	84.0	150
	21	100.0	100.0	100.0	100.0	100.0	100.0	98.7	93.3	46.7	89.2	150
TOTALS		100.0	100.0	100.0	100.0	100.0	99.8	95.5	76.0	35.0	86.2	1199



# RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

42215 FUTEHA, OKINAWA 73-77 JUL

MONTH

PERIOD

STATION NAME

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUL	00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.5	37.4	87.5	155
	03	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.0	43.2	88.3	155
	06	100.0	100.0	100.0	100.0	100.0	100.0	99.4	91.6	45.8	88.9	155
	09	100.0	100.0	100.0	100.0	100.0	100.0	92.3	46.5	14.8	80.9	155
	12	100.0	100.0	100.0	100.0	100.0	98.7	71.6	31.0	12.3	77.0	155
	15	100.0	100.0	100.0	100.0	100.0	99.4	73.5	32.3	10.3	77.3	155
	18	100.0	100.0	100.0	100.0	100.0	100.0	95.5	46.5	16.8	81.0	155
	21	100.0	100.0	100.0	100.0	100.0	100.0	99.4	78.7	26.5	85.7	155
TOTALS		100.0	100.0	100.0	100.0	100.0	99.8	91.5	62.5	25.9	83.3	1240







## RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

42215 FUTEMA, OKINAWA

73-77

Oct

STATION

STATION NAME

PERIOD

MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
OCT	00	100.0	100.0	100.0	100.0	100.0	96.1	78.7	50.3	9.0	79.1	153
	03	100.0	100.0	100.0	100.0	100.0	96.8	81.9	58.7	9.0	80.1	155
	06	100.0	100.0	100.0	100.0	100.0	98.7	84.5	61.3	9.7	80.8	155
	09	100.0	100.0	100.0	100.0	99.4	86.5	67.7	30.3	12.3	74.9	155
	12	100.0	100.0	100.0	100.0	98.1	78.1	49.0	22.6	6.5	70.7	155
	15	100.0	100.0	100.0	100.0	98.1	80.6	54.2	25.8	3.2	71.7	155
	18	100.0	100.0	100.0	100.0	100.0	91.6	72.9	31.6	7.7	76.3	155
	21	100.0	100.0	100.0	100.0	100.0	96.1	79.4	43.2	7.1	78.1	155
TOTALS		100.0	100.0	100.0	100.0	99.5	90.6	71.0	40.5	8.1	76.5	1240

## RELATIVE HUMIDITY

42215

**FUTEMA, OKINAWA**

73-77

NON

STATION

STATION NAME

PERIOD

MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
NOV	00	100.0	100.0	100.0	100.0	100.0	94.0	72.7	44.7	10.7	77.6	150
	03	100.0	100.0	100.0	100.0	100.0	96.7	68.7	50.0	12.0	78.5	150
	06	100.0	100.0	100.0	100.0	100.0	96.7	76.0	51.3	12.7	78.8	150
	09	100.0	100.0	100.0	100.0	98.7	88.0	58.7	34.7	10.0	74.5	150
	12	100.0	100.0	100.0	100.0	96.0	75.3	44.0	21.3	6.7	69.7	150
	15	100.0	100.0	100.0	100.0	96.0	80.7	50.7	20.7	6.0	70.7	150
	18	100.0	100.0	100.0	100.0	99.3	94.7	66.0	33.3	10.7	76.1	150
	21	100.0	100.0	100.0	100.0	100.0	96.0	71.3	38.7	14.7	77.6	150
TOTALS		100.0	100.0	100.0	100.0	98.8	90.3	63.5	36.8	10.4	75.5	1200

5706 RELATIVE HUMIDITY JAN 68

42215

FUTEMA, OKINAWA

73-77

DEC

STATION

STATION NAME

PERIOD

MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
DEC	00	100.0	100.0	100.0	100.0	99.4	88.4	60.0	37.4	7.7	74.9	155
	03	100.0	100.0	100.0	100.0	98.1	90.3	65.2	38.7	7.1	75.8	155
	06	100.0	100.0	100.0	100.0	97.4	89.7	70.3	42.6	5.8	76.0	155
	09	100.0	100.0	100.0	100.0	97.4	83.2	58.1	32.9	4.5	73.0	155
	12	100.0	100.0	100.0	100.0	92.3	67.7	38.1	16.8	4.5	67.3	155
	15	100.0	100.0	100.0	100.0	91.6	71.6	36.8	20.0	3.2	67.8	155
	18	100.0	100.0	100.0	100.0	98.7	81.9	52.3	27.1	6.5	72.8	155
	21	100.0	100.0	100.0	100.0	99.4	85.2	61.9	35.5	9.7	74.8	155
TOTALS		100.0	100.0	100.0	100.0	96.8	82.3	55.3	31.4	6.1	72.8	1240

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# RELATIVE HUMIDITY

5706 RELATIVE HUMIDITY JAN 68

PRINTED BY THE STANDARD REGISTRATION COMPANY, U. S. A.

42215 FUTEHA, OKINAWA 73-77 ALL

MONTH

PERIOD

STATION NAME

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JAN	ALL	100.0	100.0	100.0	99.8	96.5	82.3	53.6	30.4	11.8	73.4	1240
FEB		100.0	100.0	100.0	100.0	98.8	86.3	65.7	43.6	18.1	77.3	1128
MAR		100.0	100.0	100.0	100.0	97.9	86.1	63.9	44.8	14.0	76.7	1240
APR		100.0	100.0	100.0	99.8	98.6	92.3	76.9	54.4	15.3	79.3	1200
MAY		100.0	100.0	100.0	100.0	99.5	97.0	86.2	62.0	24.0	82.8	1240
JUN		100.0	100.0	100.0	100.0	100.0	99.8	95.5	76.0	35.0	86.2	1199
JUL		100.0	100.0	100.0	100.0	100.0	99.8	91.5	62.5	25.9	83.3	1240
AUG		100.0	100.0	100.0	100.0	100.0	99.5	89.1	50.6	9.4	80.3	1240
SEP		100.0	100.0	100.0	100.0	100.0	98.4	84.1	49.2	13.0	79.8	1200
OCT		100.0	100.0	100.0	100.0	99.5	90.6	71.0	40.5	8.1	76.5	1240
NOV		100.0	100.0	100.0	100.0	98.8	90.3	63.5	36.8	10.4	75.5	1200
DEC		100.0	100.0	100.0	100.0	96.8	82.3	55.3	31.4	6.1	72.8	1240
TOTALS		100.0	100.0	100.0	100.0	98.9	92.1	74.7	48.5	15.9	78.7	14607

NAVWEASERVCOM

PERCENTAGE FREQUENCY OF AIR TEMPERATURE  
VS.

WIND DIRECTION

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

JAN 1973-DEC 1977

YEARS

JANUARY

MONTH

ALL

HOURS (L.S.T.)

WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81											
72 TO 76	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
67 TO 71	10.7	8.0	16.0	28.0	21.3	5.3	1.3	6.7	2.7	75	6.0
62 TO 66	31.6	9.7	22.5	14.9	5.2	1.2	1.5	11.2	2.1	329	26.5
57 TO 61	28.8	31.8	18.8	5.3	1.4	.4	.4	7.6	5.5	510	41.1
52 TO 56	22.3	40.4	23.2	1.6				5.6	6.9	319	25.7
47 TO 51	50.0	50.0	25.0	25.0				25.0	25.0	4	.3
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	26.6	26.8	20.6	9.4	3.3	.8	.6	8.0	4.8	1240	100.0

NAVWEASERVCOM

## PERCENTAGE FREQUENCY OF AIR TEMPERATURE

VS.

## WIND DIRECTION

42215  
STATION

FUTENMA, OKINAWA

JAN 1973-DEC 1977

FEBRUARY

ALL

MONTH

STATION NAME

YEAR

## WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ESE & E	ENE & SE	ESSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81											
72 TO 76											
67 TO 71											
62 TO 66											
57 TO 61											
52 TO 56											
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	25.7	17.6	15.5	11.2	11.0	5.4	1.9	5.3	6.4	112.0	100.0

NAVWEASERVCOM



## PERCENTAGE FREQUENCY OF AIR TEMPERATURE

VS.

## WIND DIRECTION

42215  
STATION

FUTENMA, OKINAWA

JAN 1973-DEC 1977

MONTH

MARCH

ALL  
HOURS (L.S.T.)

## WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81				10.0		40.0	50.0			10	.8
72 TO 76	1.2	1.2	11.9	10.7	26.2	32.1	9.5	7.1		84	6.8
67 TO 71	16.1	5.1	10.1	21.2	22.8	12.0	4.1	6.6	1.9	316	25.5
62 TO 66	28.5	11.6	22.8	14.0	10.8	2.5	2.1	2.3	5.3	473	36.1
57 TO 61	36.0	26.6	16.3	5.5	1.4			1.0	13.1	289	23.3
52 TO 56	25.0	40.0	13.3						21.7	60	4.8
47 TO 51	62.5								37.5	8	.6
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	25.1	14.0	15.5	12.8	12.0	6.5	2.9	3.3	6.9	1240	100.0

## PERCENTAGE FREQUENCY OF AIR TEMPERATURE

VS.

## WIND DIRECTION

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

JAN 1973-DEC 1977

YEARS

APRIL

MONTH

ALL

HOURS (L&amp;S.T.)

## WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122 +											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86				12.0	48.0	26.0	10.0	4.0		50	4.2
77 TO 81	3.5	.6	11.7	8.8	45.6	24.0	2.9	2.3	.6	171	14.3
72 TO 76	5.7	1.4	13.9	17.2	36.2	14.4	5.7	4.1	1.4	367	30.6
67 TO 71	14.7	9.0	25.2	17.4	12.3	5.7	2.1	6.0	7.5	333	27.8
62 TO 66	24.0	22.0	26.5	16.0	3.5			2.0	6.0	200	16.7
57 TO 61	36.4	19.7	10.6	3.0	1.5			3.0	25.8	66	5.5
52 TO 56	15.4	30.8	23.1	7.7					23.1	13	1.1
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LVR											
TOTALS	12.5	8.1	18.2	14.8	23.7	10.5	3.2	3.9	5.3	1200	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE  
VS.  
WIND DIRECTION

42215 STATION NAME FUTENMA, OKINAWA JAN 1973-DEC 1977 YEARS MONTH MAY ALL HOURS 11.57.1

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81											
72 TO 76											
67 TO 71											
62 TO 66											
57 TO 61											
52 TO 56											
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	8.3	9.1	22.8	15.1	11.0	12.1	6.5	5.5	5.6	1240	100.0



PERCENTAGE FREQUENCY OF AIR TEMPERATURE  
VS.

WIND DIRECTION

STATION NAME FUTENMA, OKINAWA MONTH JUNE ALL  
STATION 42215 JAN 1973-DEC 1977 YEARS HOURS (L.S.T.)

WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91					6.7	80.0	13.3			15	1.3
82 TO 86			7.1	7.1	24.8	50.4	9.9			282	23.5
77 TO 81	2.2	.7	12.7	8.8	27.8	31.8	9.7	.7		557	46.5
72 TO 76	6.3	8.0	30.7	13.2	11.5	9.1	4.9	3.1	2.3	287	23.9
67 TO 71	7.0	26.3	40.4	3.5	1.8	1.8	1.8		13.2	57	4.8
62 TO 66			100.0						17.5	1	.1
57 TO 61											
52 TO 56											
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	2.8	3.5	16.9	9.1	21.7	29.9	8.3	2.8	5.1	1199	100.0

# PERCENTAGE FREQUENCY OF AIR TEMPERATURE VS. WIND DIRECTION

STATION NAME

42213 Futenma, Okinawa

JAN 1973-DEC 1977

JULY

ALL HOURS (L.S.T.)

STATION NAME

YEARS

MONTH

## WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122 +											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91			8.4	25.3	22.9	14.5	19.3	6.0	3.6	83	6.7
82 TO 86	2.2	1.2	17.7	26.8	20.2	14.1	8.1	5.0	4.8	504	40.6
77 TO 81	1.6	3.5	17.0	23.6	22.0	13.4	4.3	2.4	12.2	576	46.5
72 TO 76	6.6	10.5	18.4	10.5	14.5	2.6	6.6	1.3	28.9	76	6.1
67 TO 71				100.0						1	.1
62 TO 66											
57 TO 61											
52 TO 56											
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	2.0	2.7	16.8	24.3	20.9	13.1	7.0	3.6	9.6	1240	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE  
VS.

WIND DIRECTION

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

JAN 1973-DEC 1977

YEARS

AUGUST

MONTH

ALL

HOURS (L.S.T.)

WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122 +											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91	2.4	2.4	36.9	16.7	13.1	9.5	13.1	6.0		84	1
82 TO 86	7.4	4.4	33.1	19.3	6.7	6.7	10.0	10.1	2.3	653	52.7
77 TO 81	5.7	5.1	26.4	23.3	10.1	4.3	3.7	5.7	15.8	493	39.8
72 TO 76		11.1		22.2				11.1	55.6	9	.7
67 TO 71											
62 TO 66											
57 TO 61											
52 TO 56											
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	6.3	4.7	30.4	20.7	8.5	5.9	7.6	6.1	7.9	1240	100.0



PERCENTAGE FREQUENCY OF AIR TEMPERATURE  
VS.

WIND DIRECTION

42215 STATION NAME: FUTENMA, OKINAWA  
JAN 1973-DEC 1977 MONTH: SEPTEMBER ALL  
STATION NAME: HOURS: 1457.1

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91	6.7	6.7	36.7	20.0	3.3	6.7	6.7	6.7	6.7	30	2.5
82 TO 86	7.5	6.9	30.2	16.4	8.6	6.9	7.1	11.5	4.8	477	39.8
77 TO 81	6.0	10.1	19.7	16.5	11.9	1.4	5.3	3.4	25.6	563	46.9
72 TO 76	4.0	25.0	23.4	13.7	3.2		2.4	.8	27.4	124	10.3
67 TO 71	33.3	50.0							16.7	6	.5
62 TO 66											
57 TO 61											
52 TO 56											
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	6.4	10.4	24.8	16.2	9.4	3.6	5.8	6.4	17.0	1200	100.0

vs.

WIND DIRECTION

42215  
STATION

FUTENMA, OKINAWA

JAN 1973-DEC 1977

**OCTOBER**  
**1970**

**ALL**

HOURS (L.S.T.)

WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
82 TO 86	16.3	14.9	35.5	9.9	6.4	1.4	8.5	3.5	3.5	141	11.4
77 TO 81	8.7	21.0	38.2	10.6	4.3	4.5	2.2	2.4	8.2	539	43.5
72 TO 76	12.7	33.3	24.6	7.0	5.3	1.5	1.1	.9	13.6	456	36.8
67 TO 71	13.0	46.7	25.0	1.1	1.1		1.1		12.0	92	7.4
62 TO 66	10.0	20.0	40.0						30.0	10	.8
57 TO 61											
52 TO 56											
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	11.5	26.7	31.9	8.4	4.7	2.7	2.4	1.8	10.1	1240	100.0

NAVWEASERVCOM

PERCENTAGE FREQUENCY OF AIR TEMPERATURE  
VS.

WIND DIRECTION

42215  
STATION

FUTENMA, OKINAWA

STATION NAME

JAN 1973-DEC 1977

YEARS

NOVEMBER

MONTH

ALL

HOURS (L.S.T.)

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81	11.7	13.6	26.0	20.0	20.0	20.0	20.0	1.9	3.9	103	5
72 TO 76	19.1	32.5	45.6	17.5	4.9	1.0	1.0	1.8	3.9	335	103
67 TO 71	26.9	41.3	31.9	6.9	1.8	1.2	1.5	1.1	4.1	465	27.9
62 TO 66	29.2	47.7	21.7	1.9	2.4	.4	.2	.4	5.8	243	38.8
57 TO 61	4.1	59.2	16.5	.4				.4	8.2	49	20.3
52 TO 56			28.6								4.1
47 TO 51											
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	22.8	38.3	25.6	4.2	1.9	.6	.7	1.2	4.5	1200	100.0



## PERCENTAGE FREQUENCY OF AIR TEMPERATURE

VS.

## WIND DIRECTION

42213  
STATION

FUTENMA, OKINAWA

JAN 1973-DEC 1977

DECEMBER

ALL  
HOURS (L.S.T.)

## WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96											
87 TO 91											
82 TO 86											
77 TO 81					50.0	50.0				2	.2
72 TO 76	14.9	5.3	17.0	17.0	23.4	12.8	3.2	5.3	1.1	94	7.6
67 TO 71	19.2	16.0	24.9	11.5	11.0	3.8	3.6	3.0	6.2	338	27.3
62 TO 66	32.5	36.5	18.3	2.8	.4		.4	.4	8.5	458	36.9
57 TO 61	35.5	37.1	18.7					2.4	6.4	251	20.2
52 TO 56	62.6	34.0	10.6		1.1			6.4	5.3	94	7.6
47 TO 51	66.7	33.3								3	.2
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LVR											
TOTALS	29.0	28.4	19.4	5.5	5.3	2.1	1.4	2.3	6.6	1240	100.0

PERCENTAGE FREQUENCY OF AIR TEMPERATURE  
VS.

WIND DIRECTION

42213  
STATION

FUTENMA, OKINAWA

STATION NAME

JAN 1973-DEC 1977

YEARS

ALL  
MONTH

ALL  
HOURS (L.S.T.)

WIND DIRECTION

TEMP.	NNW & N	NNE & NE	ENE & E	ESE & SE	SSE & S	SSW & SW	WSW & W	WNW & NW	CALM	TOTAL FREQ.	% OF TOTAL
122+											
117 TO 121											
112 TO 116											
107 TO 111											
102 TO 106											
97 TO 101											
92 TO 96	100.0									1	.0
87 TO 91	2.3	1.9	22.8	19.1	15.3	15.8	14.9	5.6	2.3	215	1.5
82 TO 86	5.4	4.1	24.1	17.9	13.6	15.4	9.1	7.2	3.1	2185	15.0
77 TO 81	4.8	7.2	22.3	16.4	16.4	13.1	5.5	3.6	10.7	3341	22.9
72 TO 76	9.5	15.4	23.3	14.1	14.1	7.6	3.7	3.6	8.7	2461	16.8
67 TO 71	17.2	19.8	21.2	12.7	11.2	5.2	2.4	3.9	6.4	2096	14.3
62 TO 66	28.0	22.2	21.0	10.8	6.4	1.2	1.1	3.5	5.7	2093	14.3
57 TO 61	33.5	29.8	17.6	3.9	1.3	.1	.5	4.3	9.0	1485	10.2
52 TO 56	27.6	39.1	18.5	1.1	.1			5.2	8.4	699	4.8
47 TO 51	51.6	22.6	6.5	3.2				3.2	12.9	31	.2
42 TO 46											
37 TO 41											
32 TO 36											
27 TO 31											
22 TO 26											
17 TO 21											
12 TO 16											
7 TO 11											
2 TO 6											
-3 TO 1											
-8 TO -4											
-13 TO -9											
-18 TO -14											
-23 TO -19											
-28 TO -24											
-33 TO -29											
-38 TO -34											
-43 TO -39											
-48 TO -44											
-53 TO -49											
-58 TO -54											
-59 & LWR											
TOTALS	14.9	15.9	21.7	12.9	11.1	7.7	4.0	4.3	7.5	14607	100.0

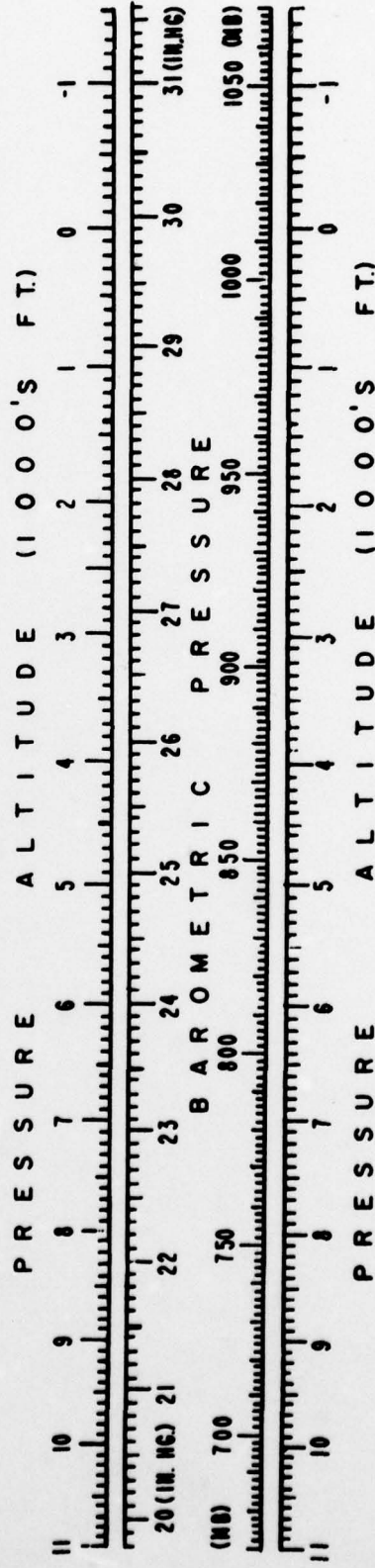
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## PART F PRESSURE SUMMARY

Presented in this part are two tables giving the means, standard deviations, and total number of observations of station pressure and sea-level pressure by month and annual for the local hourly observations corresponding to the eight 3-hourly synoptic times GCT. The same computations are also provided at the bottom of the page for all hours combined. All years of data available are combined in both of these tables, although the overall period is limited to January 1946 through December 1963 because of changes in reporting practices before and after those dates.

1. Station pressure in inches of mercury.
2. Sea-level pressure in millibars.

Provided below is a scale to convert station pressure values in inches of mercury or millibars to pressure altitude in 1000's of feet. This scale is an enlarged model of the pressure altitude scale in the Smithsonian Meteorological Tables.





## MEANS AND STANDARD DEVIATIONS

5707 MEANS AND STANDARD DEVIATIONS JAN 68

STATION PRESSURE IN INCHES HG FROM HOURLY OBSERVATIONS

73-77

PUTEMA, OKINAWA

42215

STATION NAME

YEARS

HRS.(LST.)	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
00	29.831 MEAN S. D. TOTAL OBS	29.812 .109 .155	29.784 .131 .155	29.700 .098 .150	29.593 .112 .155	29.508 .082 .150	29.503 .127 .155	29.465 .158 .155	29.567 .145 .150	29.678 .089 .155	29.779 .105 .150	29.850 .111 .155	29.672 .178 1826
03	29.814 MEAN S. D. TOTAL OBS	29.793 .105 .155	29.760 .134 .155	29.669 .098 .150	29.561 .116 .155	29.478 .083 .150	29.483 .123 .155	29.439 .161 .155	29.543 .139 .150	29.653 .090 .155	29.758 .107 .150	29.828 .108 .155	29.647 .180 1826
06	29.808 MEAN S. D. TOTAL OBS	29.787 .106 .155	29.759 .136 .155	29.667 .100 .150	29.560 .119 .155	29.478 .084 .149	29.483 .123 .155	29.435 .163 .155	29.541 .137 .150	29.653 .091 .155	29.756 .106 .150	29.826 .109 .155	29.646 .180 1825
09	29.845 MEAN S. D. TOTAL OBS	29.820 .107 .155	29.794 .136 .155	29.703 .101 .150	29.588 .117 .155	29.500 .086 .149	29.504 .122 .155	29.458 .166 .155	29.572 .141 .150	29.690 .093 .155	29.795 .104 .150	29.865 .109 .155	29.677 .185 1825
12	29.832 MEAN S. D. TOTAL OBS	29.814 .105 .155	29.786 .134 .155	29.699 .099 .150	29.589 .115 .155	29.500 .084 .150	29.503 .121 .155	29.455 .170 .155	29.566 .147 .150	29.680 .092 .155	29.778 .103 .150	29.849 .110 .155	29.670 .182 1826
15	29.780 MEAN S. D. TOTAL OBS	29.763 .103 .155	29.735 .133 .155	29.659 .095 .150	29.557 .112 .155	29.478 .084 .150	29.480 .121 .155	29.430 .167 .155	29.530 .151 .150	29.637 .091 .155	29.735 .104 .150	29.800 .108 .155	29.631 .173 1826
18	29.800 MEAN S. D. TOTAL OBS	29.773 .107 .155	29.742 .135 .155	29.655 .096 .150	29.544 .139 .155	29.471 .082 .150	29.468 .123 .155	29.426 .165 .155	29.531 .158 .150	29.651 .091 .155	29.753 .106 .150	29.820 .108 .155	29.636 .183 1826
21	29.833 MEAN S. D. TOTAL OBS	29.808 .109 .155	29.776 .134 .155	29.691 .099 .150	29.579 .113 .155	29.499 .083 .150	29.494 .124 .155	29.456 .162 .155	29.565 .151 .150	29.684 .092 .155	29.785 .107 .150	29.853 .109 .155	29.668 .182 1826
ALL HOURS	29.818 MEAN S. D. TOTAL OBS	29.796 .108 1240	29.767 .135 1240	29.680 .118 1240	29.571 .119 1240	29.489 .084 1198	29.490 .123 1240	29.446 .164 1240	29.552 .147 1200	29.662 .093 1240	29.767 .107 1200	29.836 .111 1240	29.656 .181 14606

## MEANS AND STANDARD DEVIATIONS

SEA LEVEL PRESSURE IN MBS FROM HOURLY OBSERVATIONS

73-77

42215 FUTEMA, OKINAWA

STATION NAME

YEARS

HRS.(L.S.T.)	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
00	MEAN S. D. TOTAL OBS	1020.1 3.717 155	1019.4 4.530 155	1018.4 3.968 155	1015.5 3.389 150	1011.7 3.843 155	1008.6 2.868 150	1008.5 4.296 155	1010.7 5.418 155	1010.7 4.870 150	1014.5 3.015 155	1020.6 3.874 155	1014.4 6.196 1826
03	MEAN S. D. TOTAL OBS	1019.5 3.598 155	1018.7 4.625 155	1017.6 3.985 155	1014.4 3.515 150	1010.6 3.958 155	1007.7 2.834 150	1007.8 4.175 155	1009.9 4.754 150	1013.7 3.074 155	1017.4 3.652 150	1019.9 3.741 155	1013.6 6.254 1826
06	MEAN S. D. TOTAL OBS	1019.3 3.618 155	1018.6 4.722 155	1017.5 3.986 155	1014.3 3.478 150	1010.6 4.055 155	1007.7 2.861 150	1007.8 4.204 155	1009.8 4.675 150	1013.7 3.114 155	1017.3 3.646 150	1019.9 3.739 155	1013.5 6.250 1826
09	MEAN S. D. TOTAL OBS	1020.5 3.649 155	1019.6 4.702 155	1018.7 3.986 155	1015.4 3.470 150	1011.5 4.004 155	1008.4 2.895 149	1008.4 4.135 155	1010.8 4.800 150	1014.9 3.126 155	1018.6 3.589 150	1021.1 3.745 155	1014.5 6.415 1825
12	MEAN S. D. TOTAL OBS	1020.0 3.583 155	1019.4 4.623 155	1018.4 4.093 155	1015.3 3.417 150	1011.4 3.937 155	1008.3 2.845 150	1008.4 4.119 155	1010.8 4.992 150	1014.5 3.087 155	1018.0 3.541 150	1020.5 3.766 155	1014.3 6.293 1826
15	MEAN S. D. TOTAL OBS	1018.3 3.542 155	1017.6 4.583 155	1016.6 4.028 155	1013.9 3.306 150	1010.4 3.823 155	1007.6 2.850 150	1007.6 4.084 155	1009.9 5.155 150	1013.1 3.051 155	1016.5 3.571 150	1018.9 3.716 155	1012.9 6.013 1826
18	MEAN S. D. TOTAL OBS	1019.0 3.654 155	1018.1 4.653 155	1016.9 3.993 155	1013.8 3.331 150	1010.2 3.781 155	1007.4 2.763 150	1007.2 4.107 155	1009.4 5.332 150	1013.6 3.106 155	1017.2 3.640 150	1019.6 3.703 155	1013.2 6.285 1826
21	MEAN S. D. TOTAL OBS	1020.1 3.742 155	1019.2 4.615 155	1018.1 3.964 155	1015.1 3.412 150	1011.2 3.860 155	1008.4 2.831 150	1008.2 4.213 155	1010.6 5.166 150	1014.7 3.107 155	1018.3 3.696 150	1020.7 3.742 155	1014.3 6.323 1826
ALL HOURS	MEAN S. D. TOTAL OBS	1019.6 3.693 1240	1018.8 4.665 1128	1017.8 4.048 1240	1014.7 3.464 1200	1010.9 3.934 1240	1008.0 2.868 1199	1008.0 4.178 1240	1010.6 5.605 1240	1014.1 3.136 1240	1017.7 3.664 1200	1020.1 3.804 1240	1013.8 6.279 14607